

FIG. 1

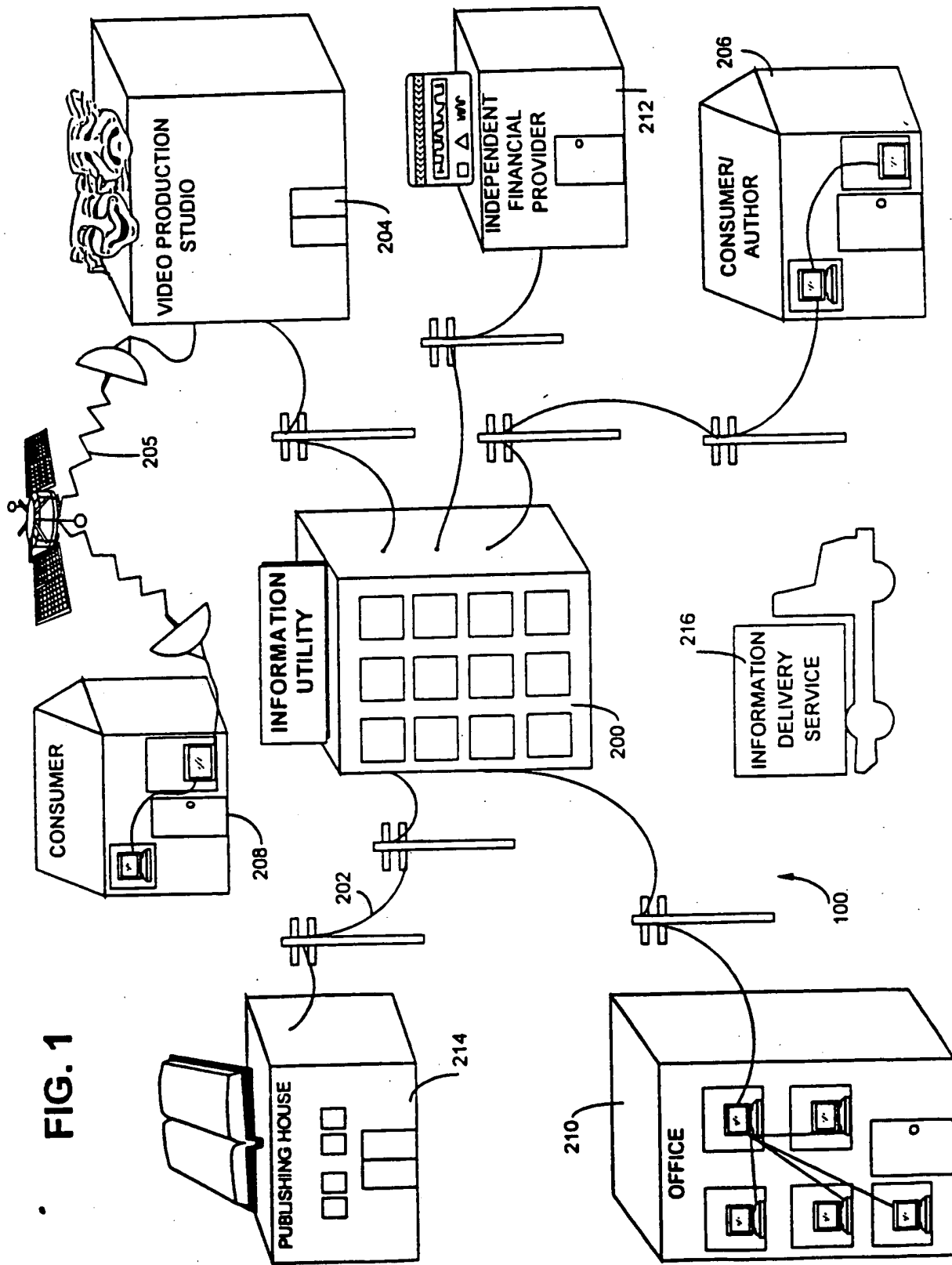


FIG. 1A

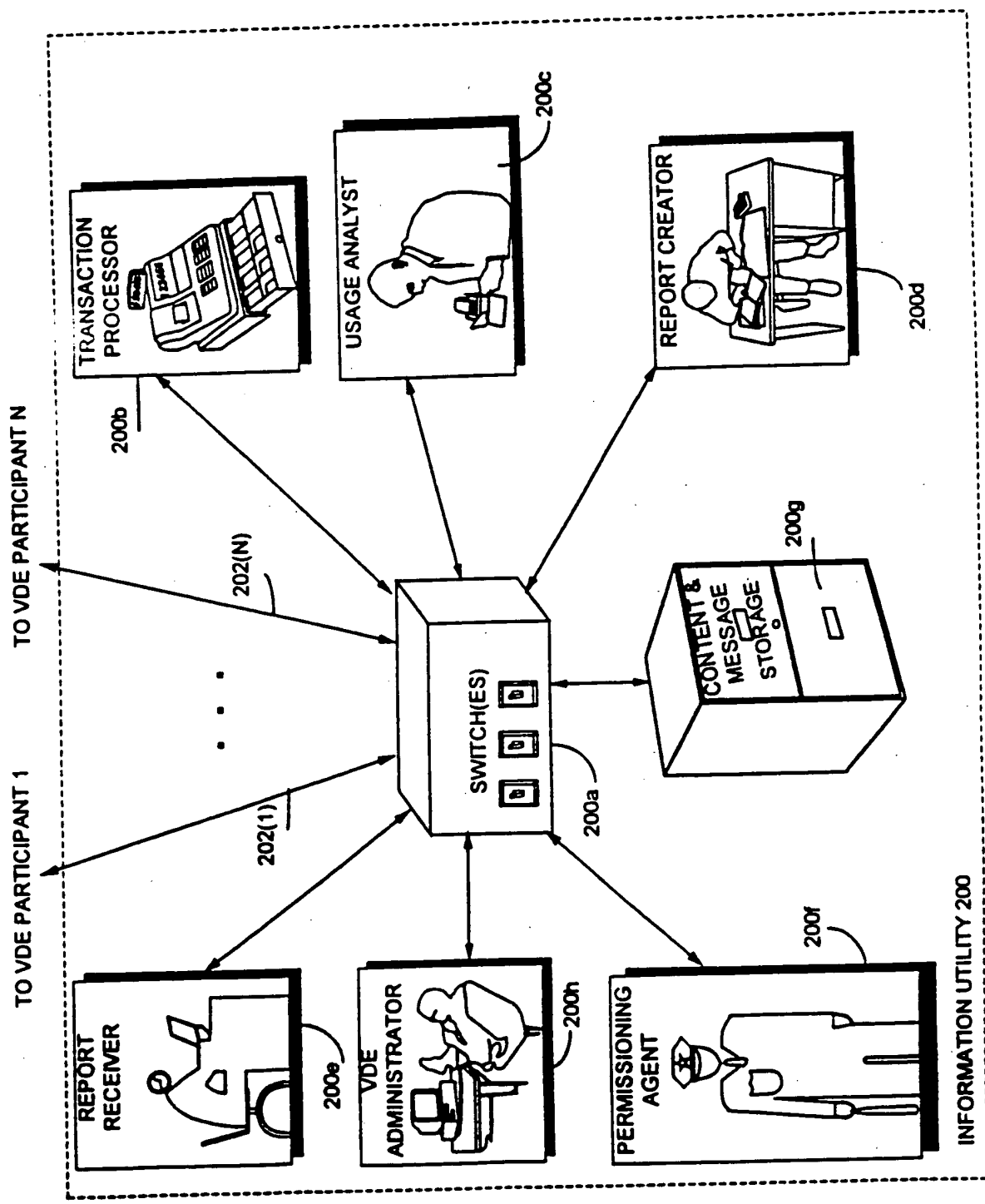


FIG. 1A

FIG. 2

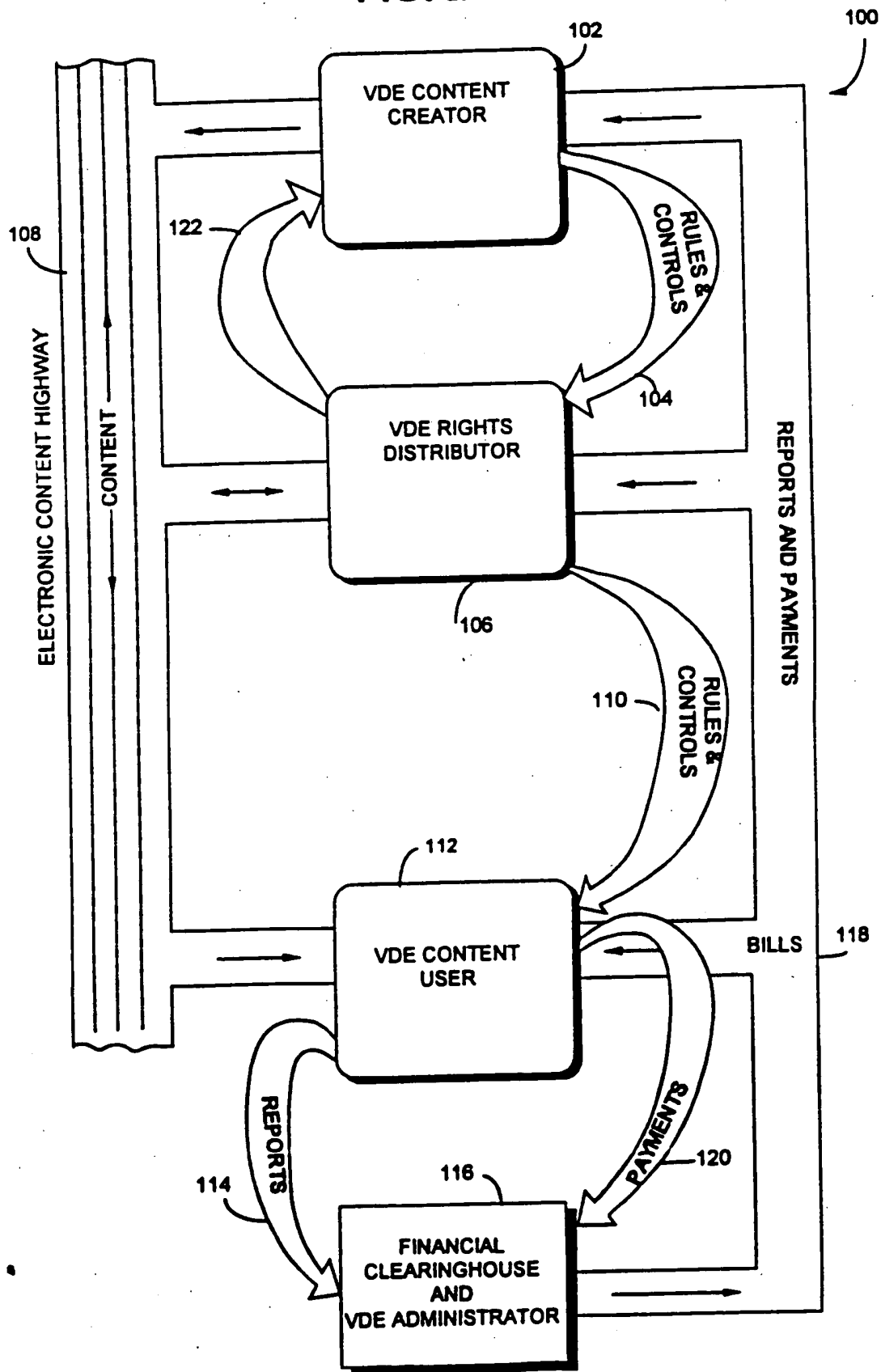


FIG. 2A

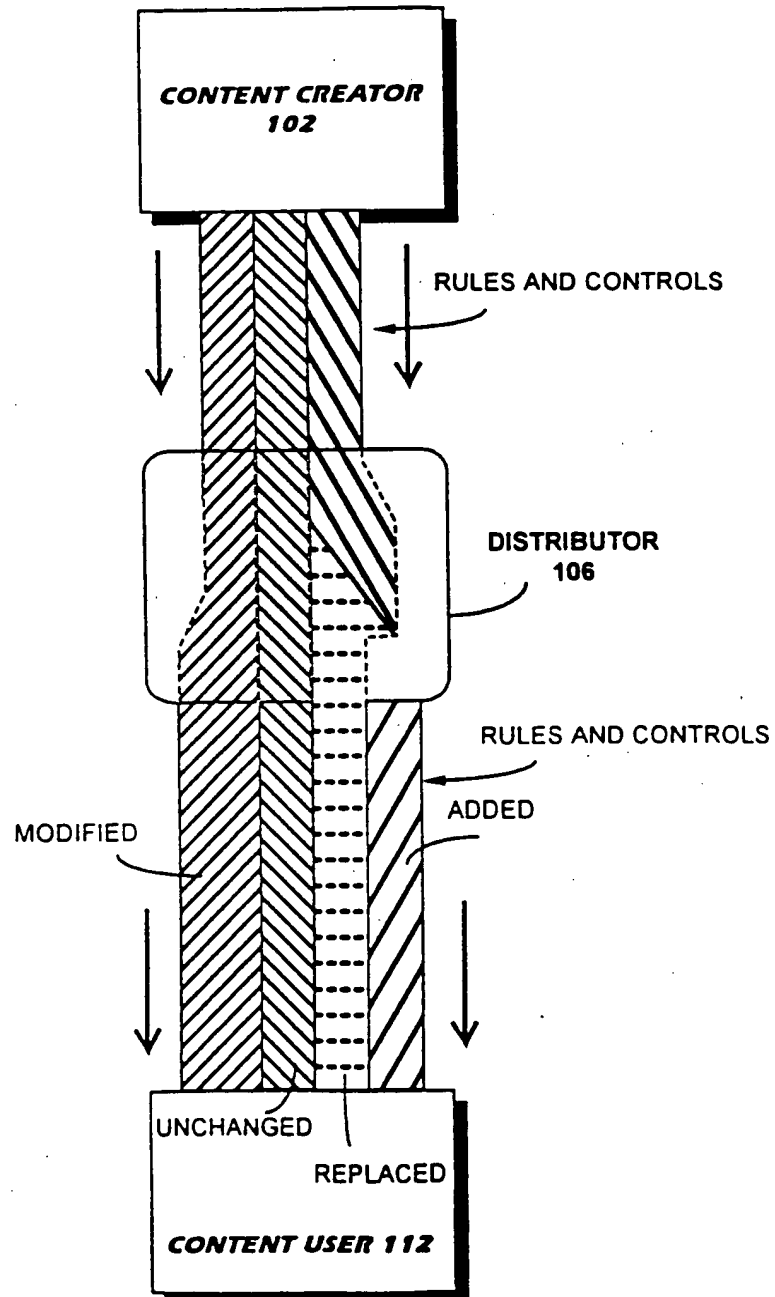


FIG. 3

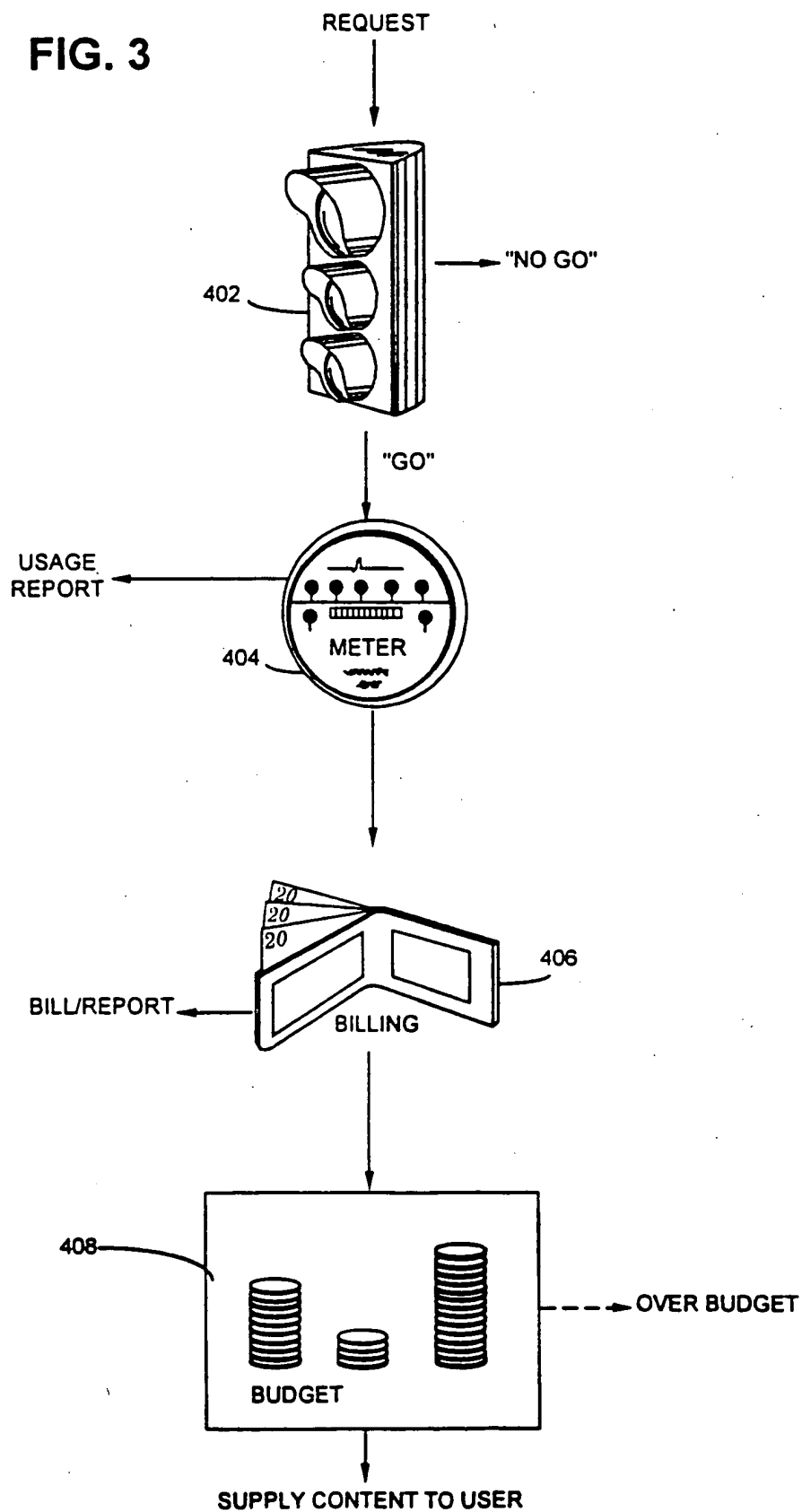


FIG. 3

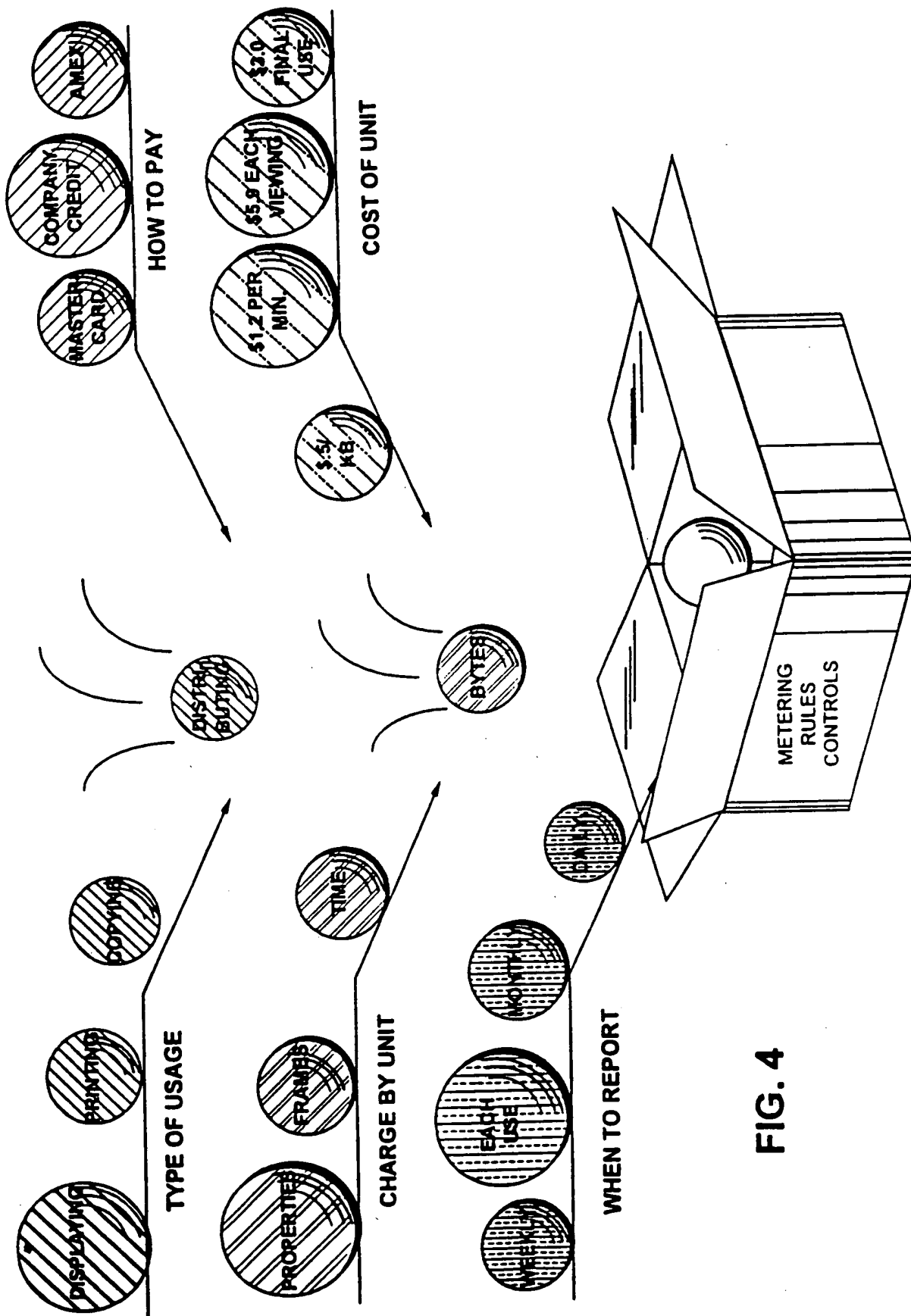


FIG. 4

**FIG. 5A**

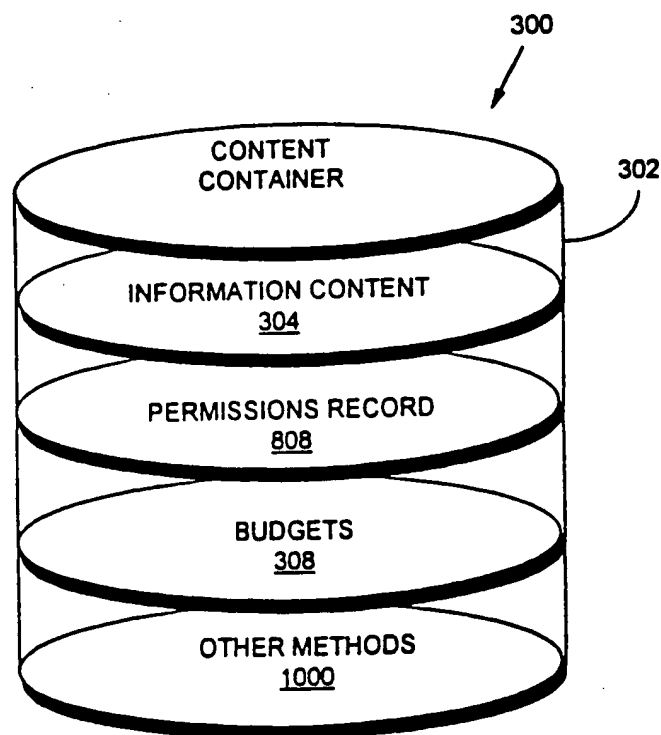


FIG. 5B

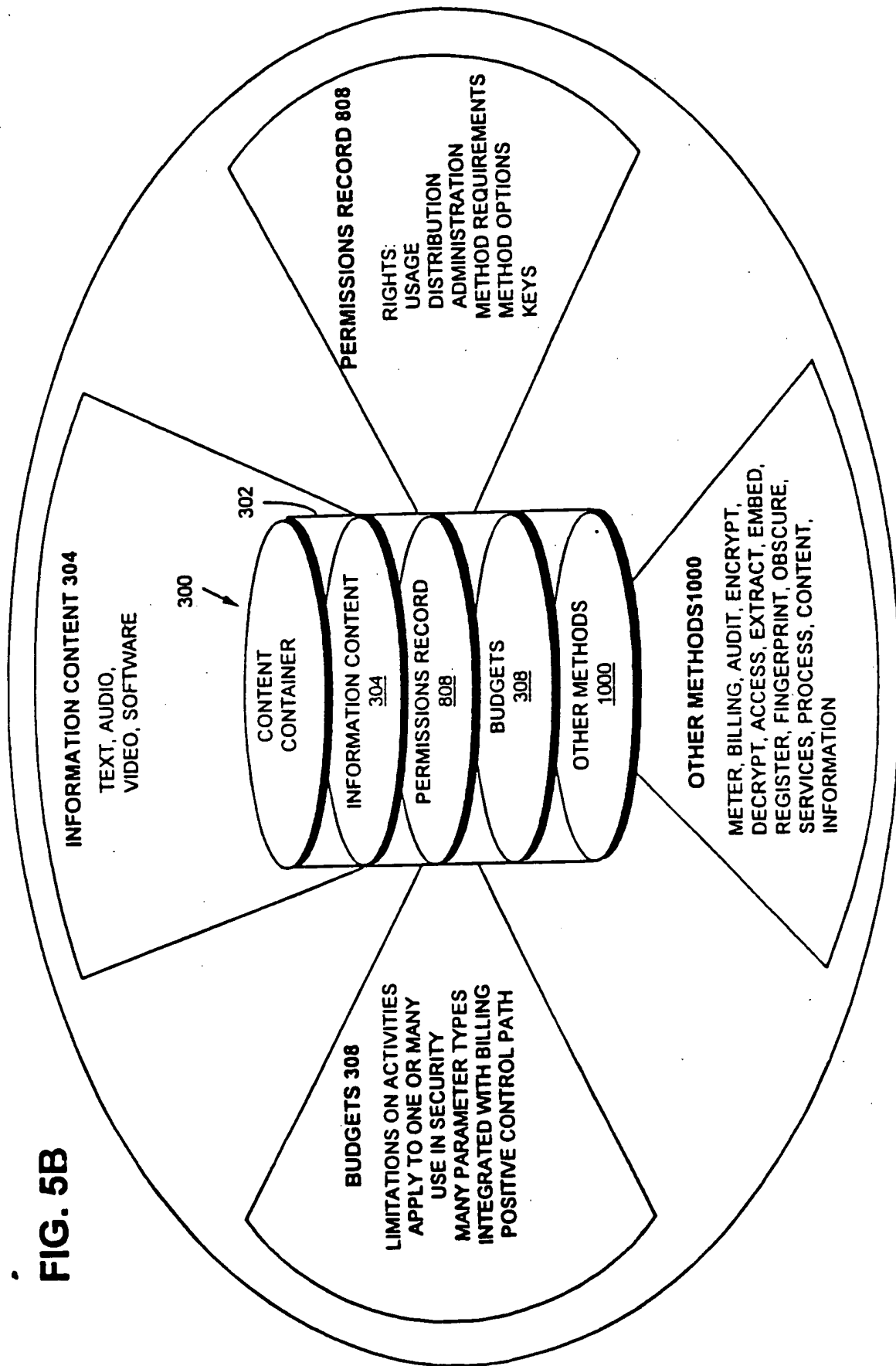
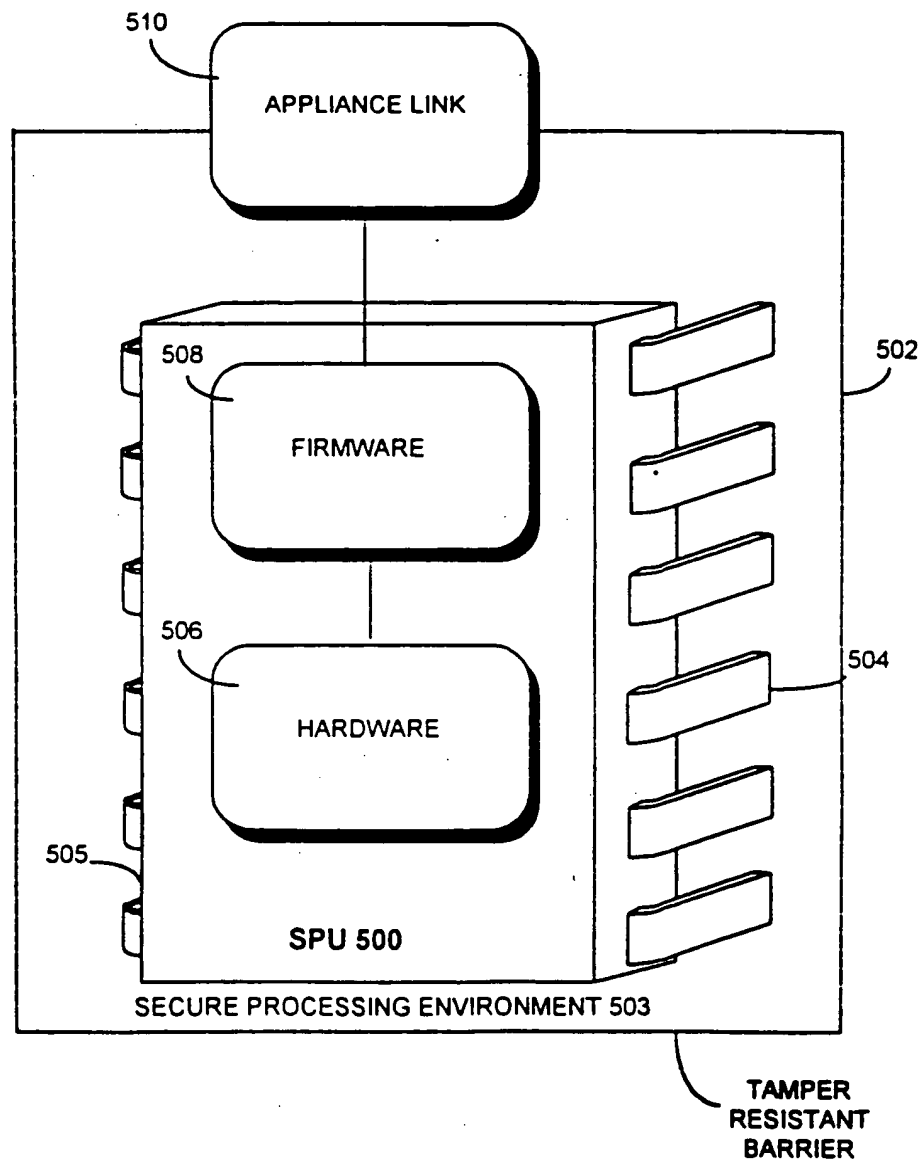
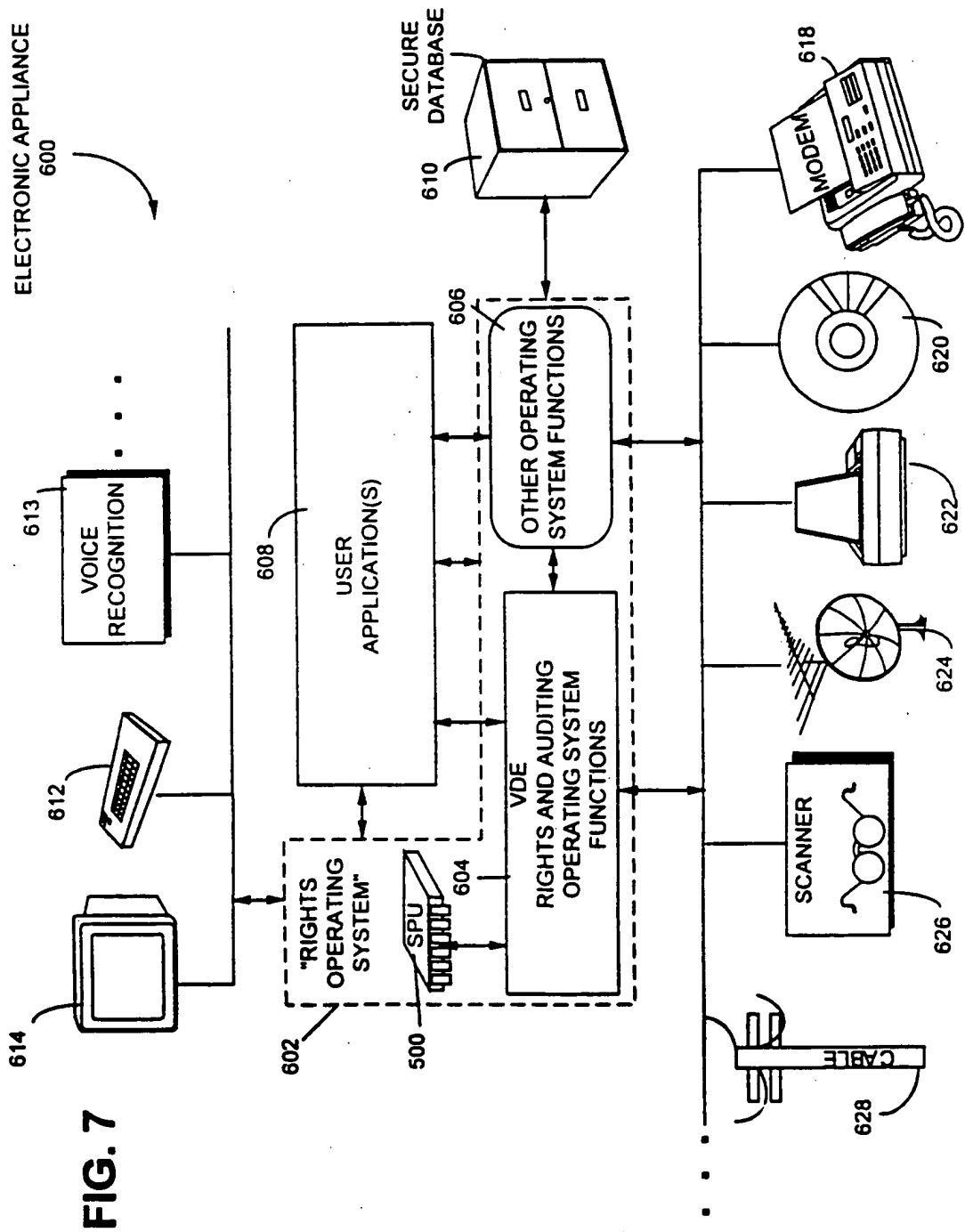


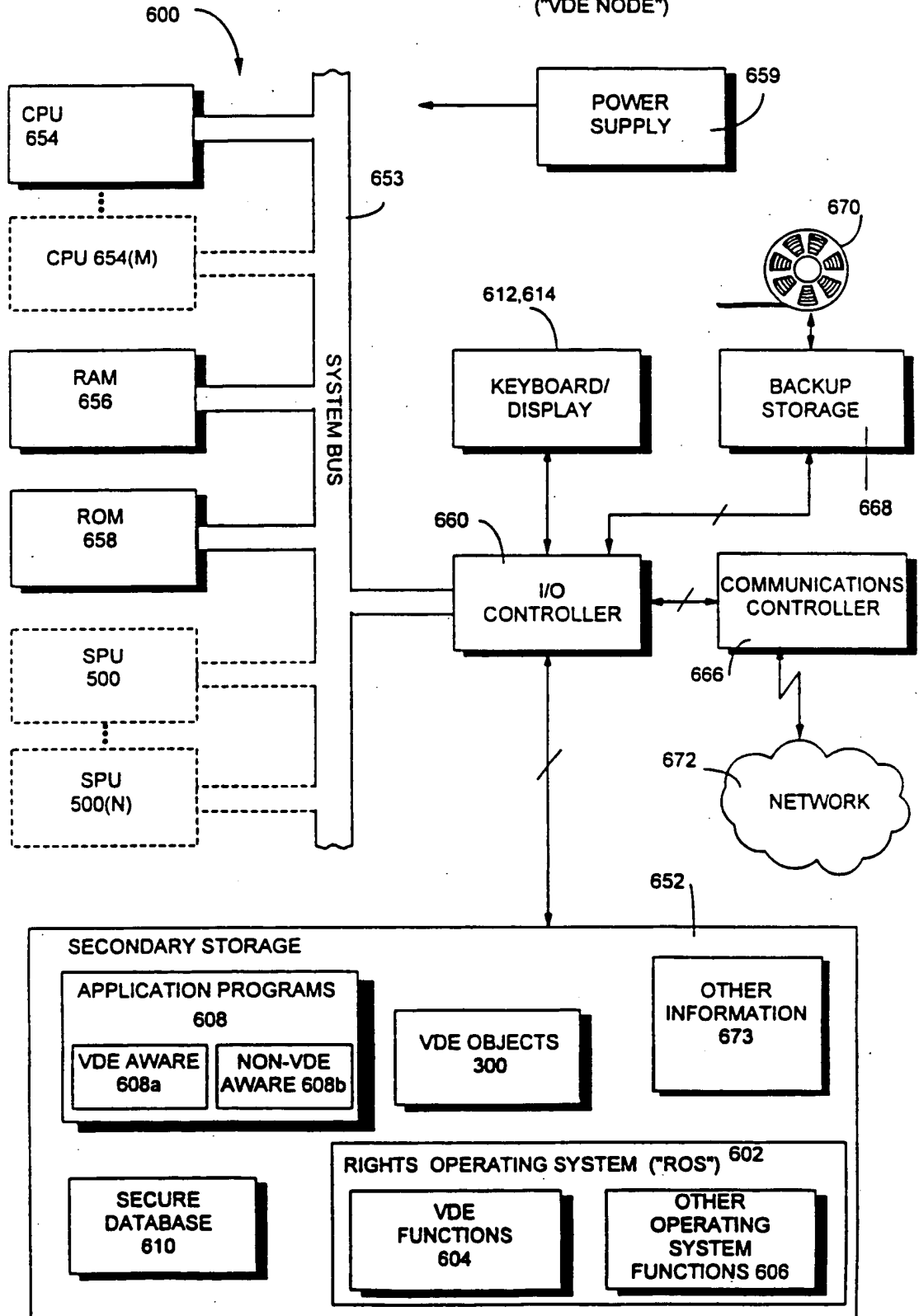


FIG. 6





**FIG. 8** ELECTRONIC APPLIANCE 600  
("VDE NODE")



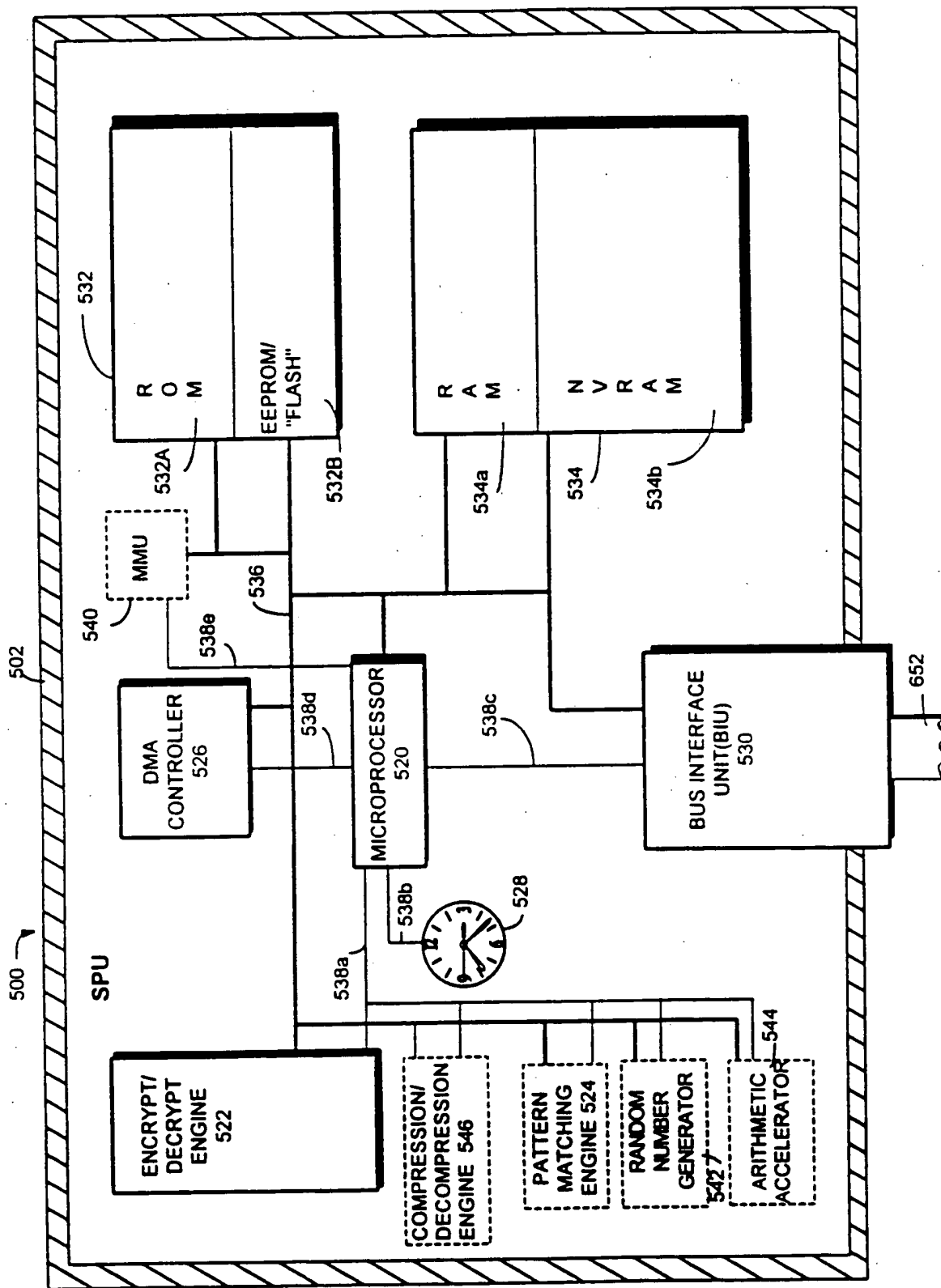


FIG. 9

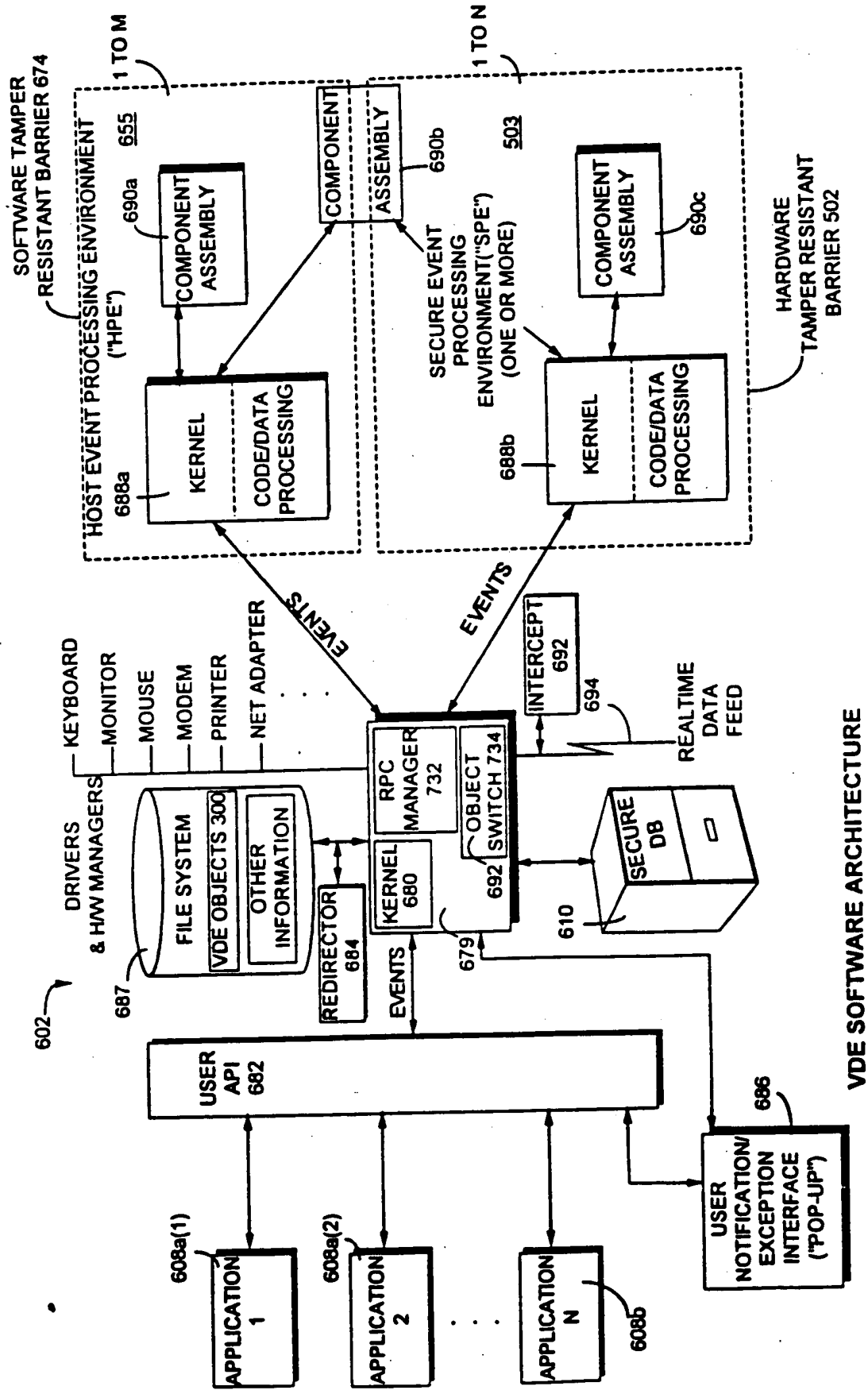


FIG. 10

FIG. 11C

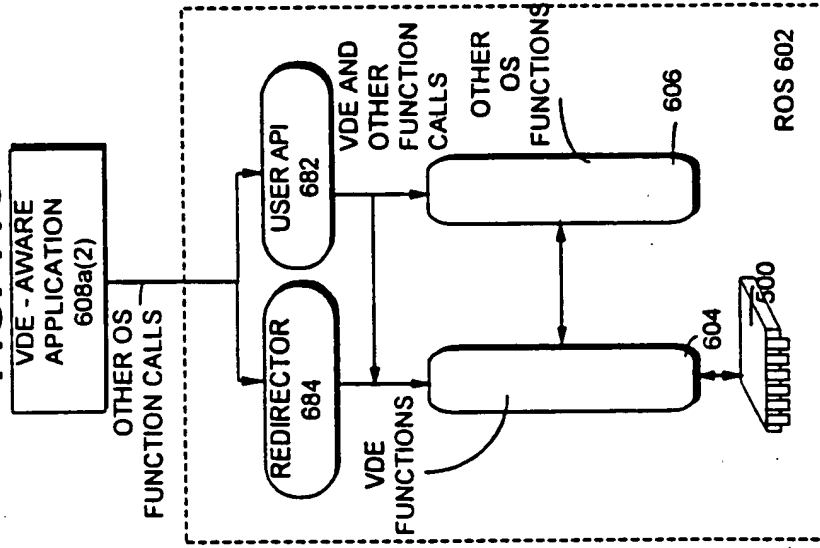


FIG. 11B

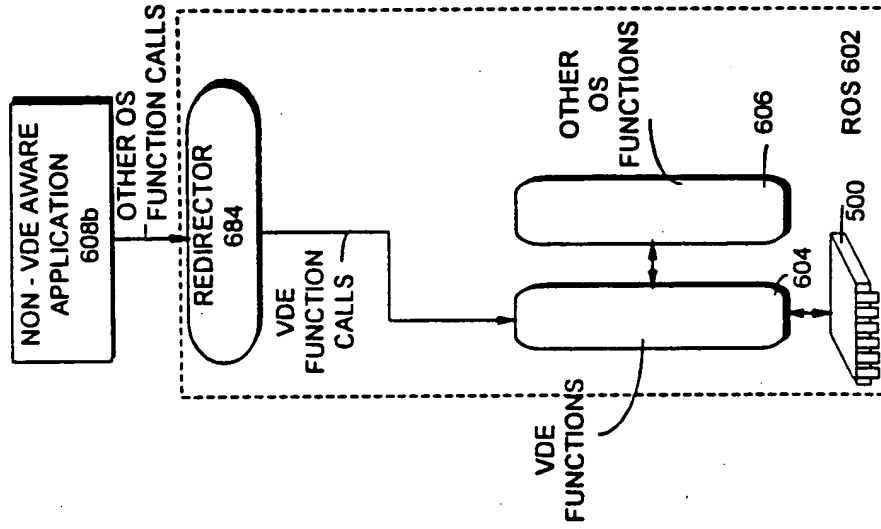


FIG. 11A

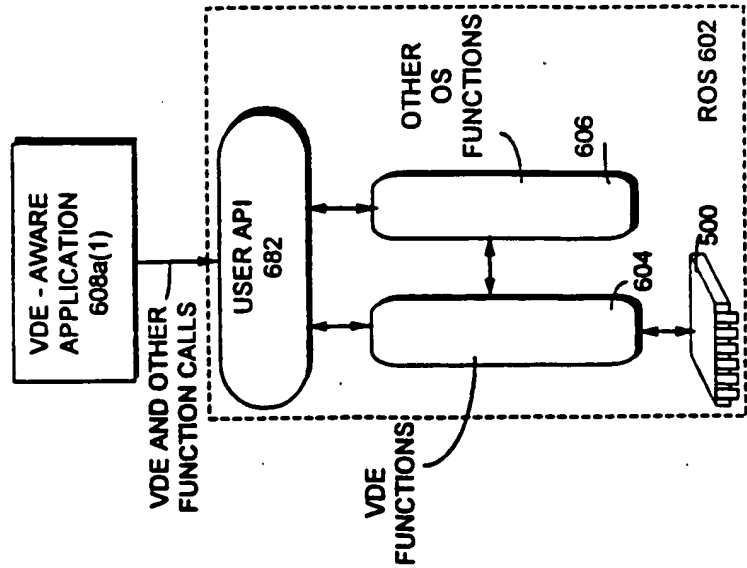


FIG. 11D

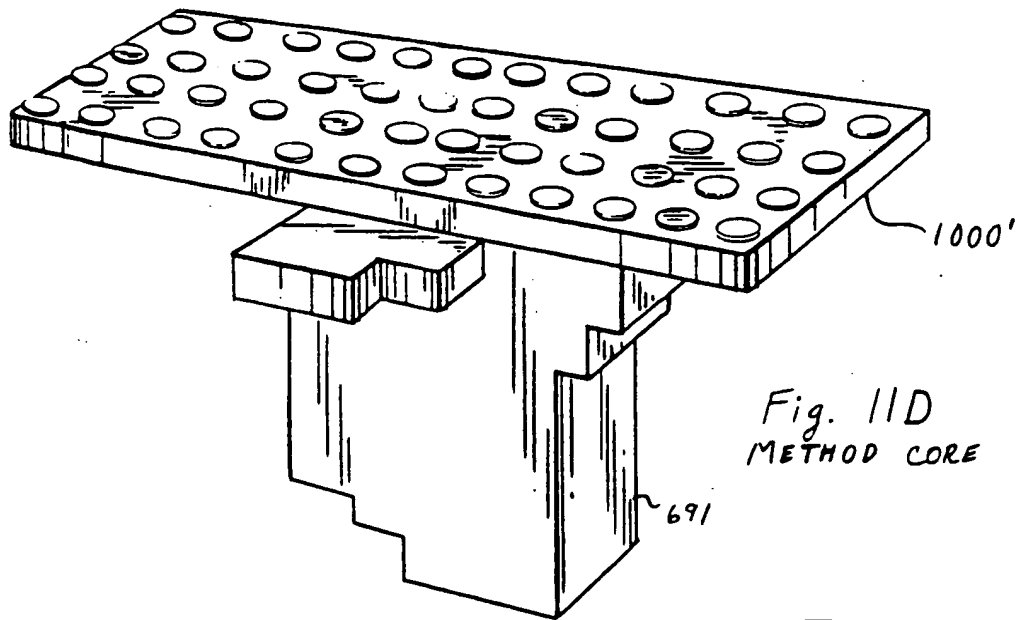


Fig. 11D  
METHOD CORE

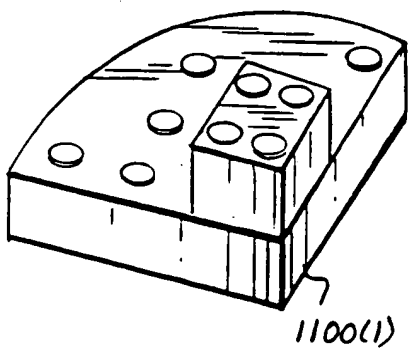


Fig. 11E  
LOAD MODULE  
WITH DTD

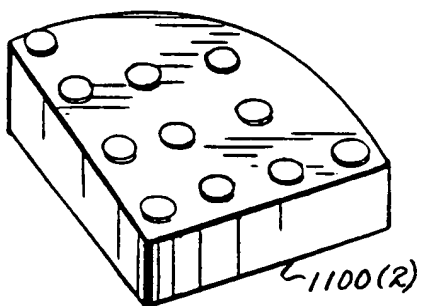


Fig. 11F  
LOAD MODULE

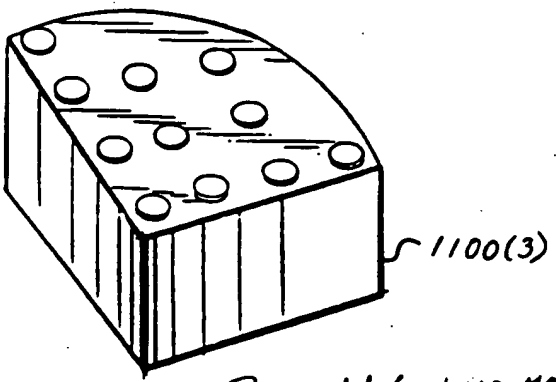
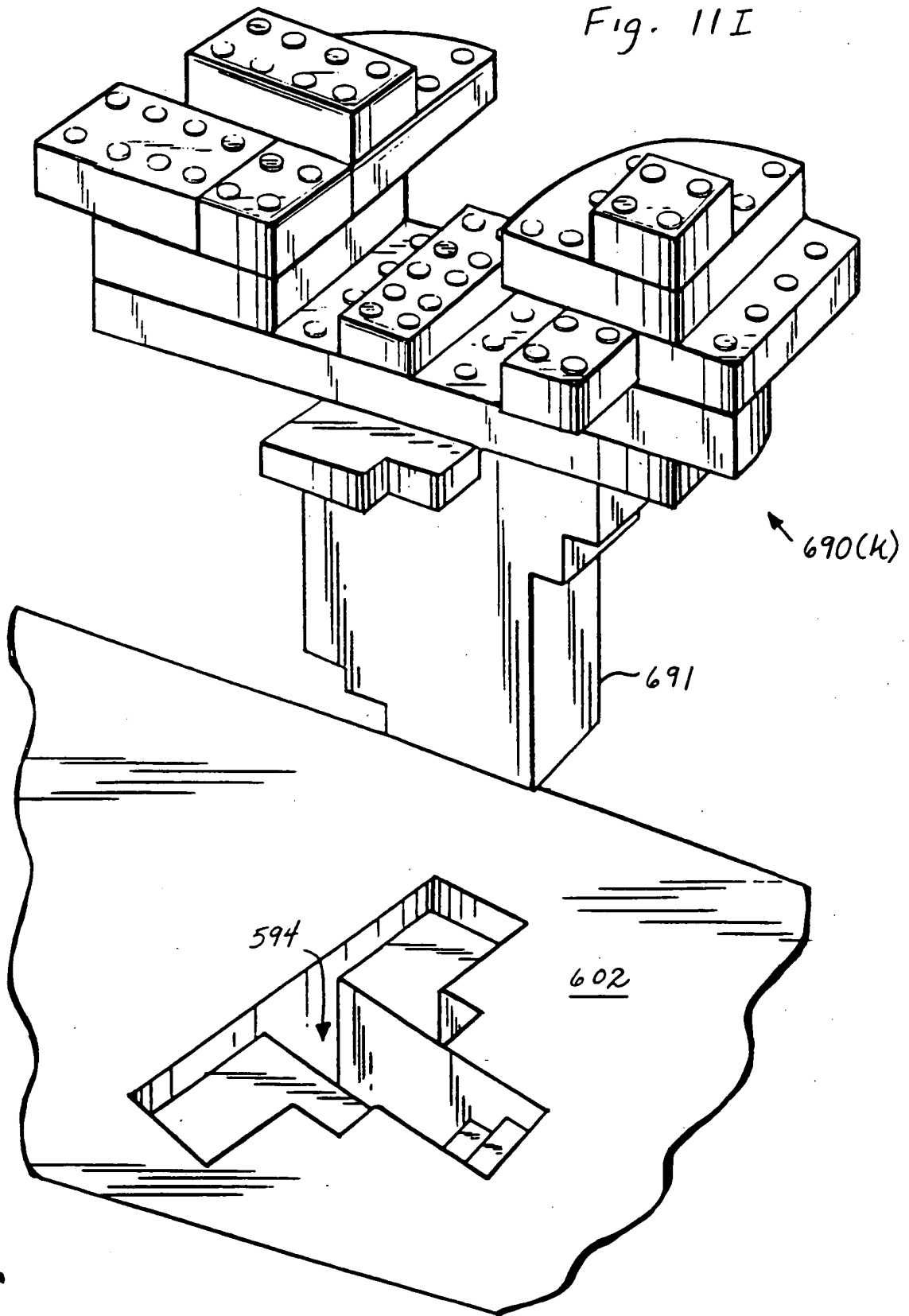


Fig. 11G LOAD MODULE

— 22 —



Fig. 11I



606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999

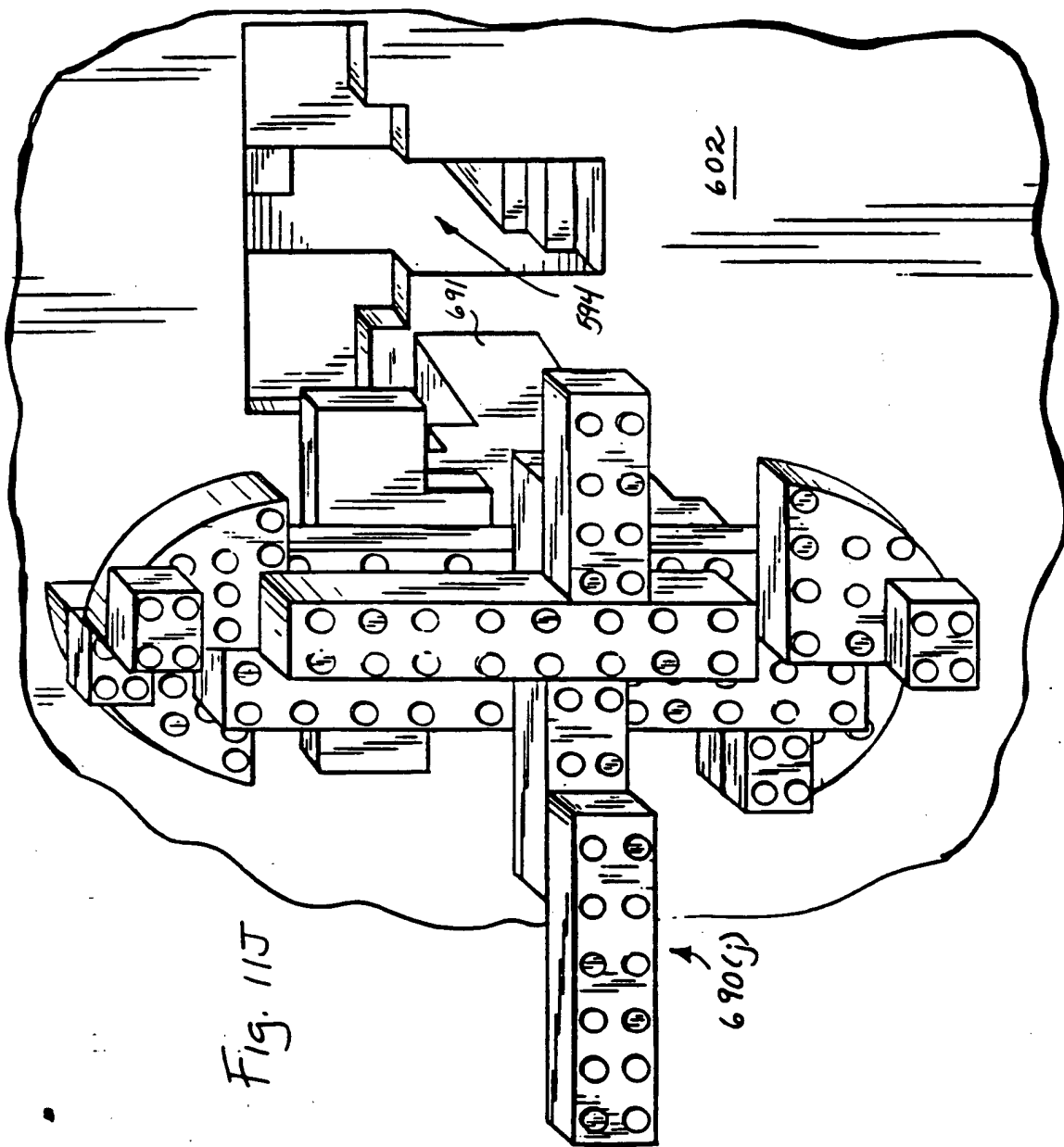
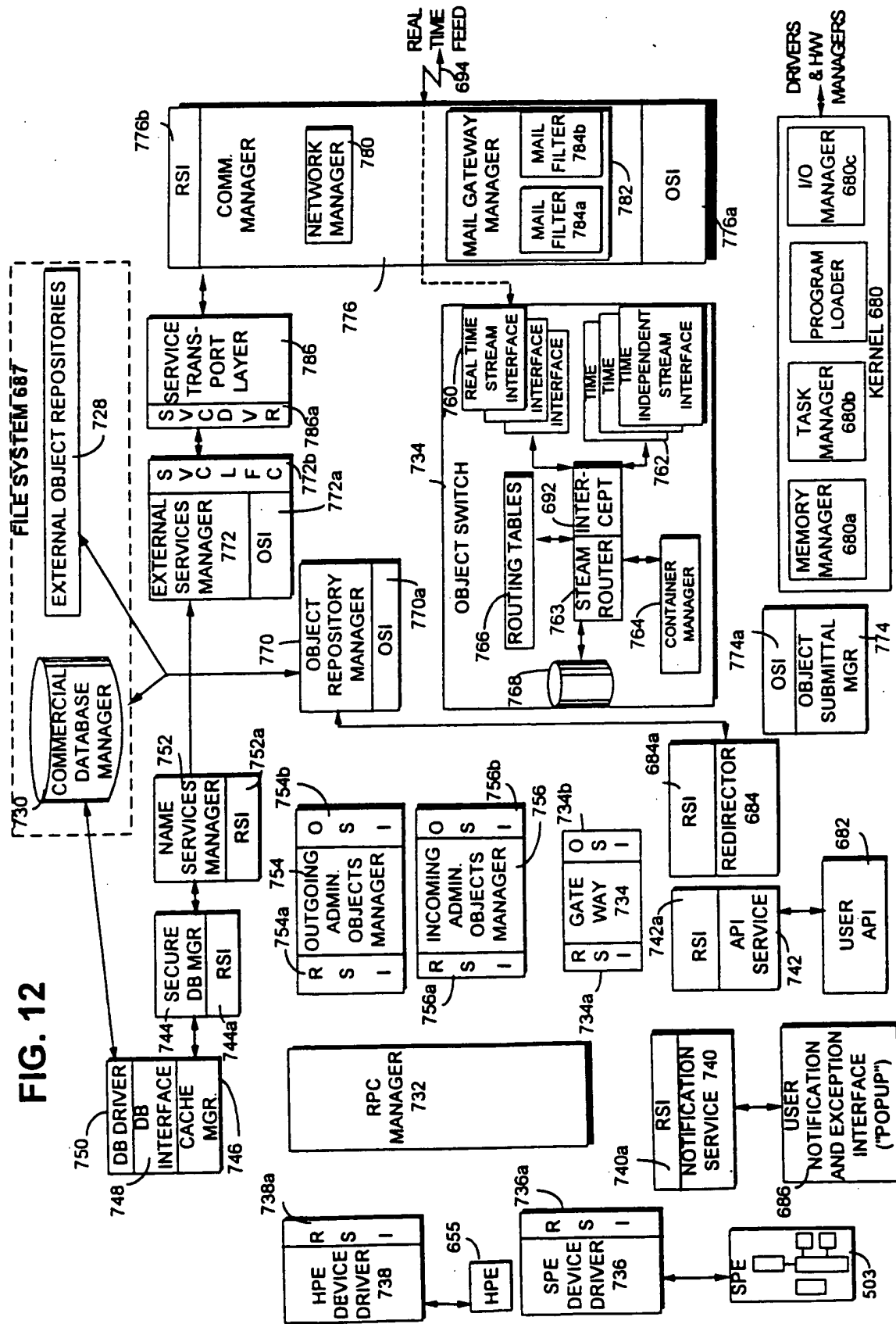


Fig. 11J

FIG. 12



**FIG. 12A**  
OBJECT CREATION

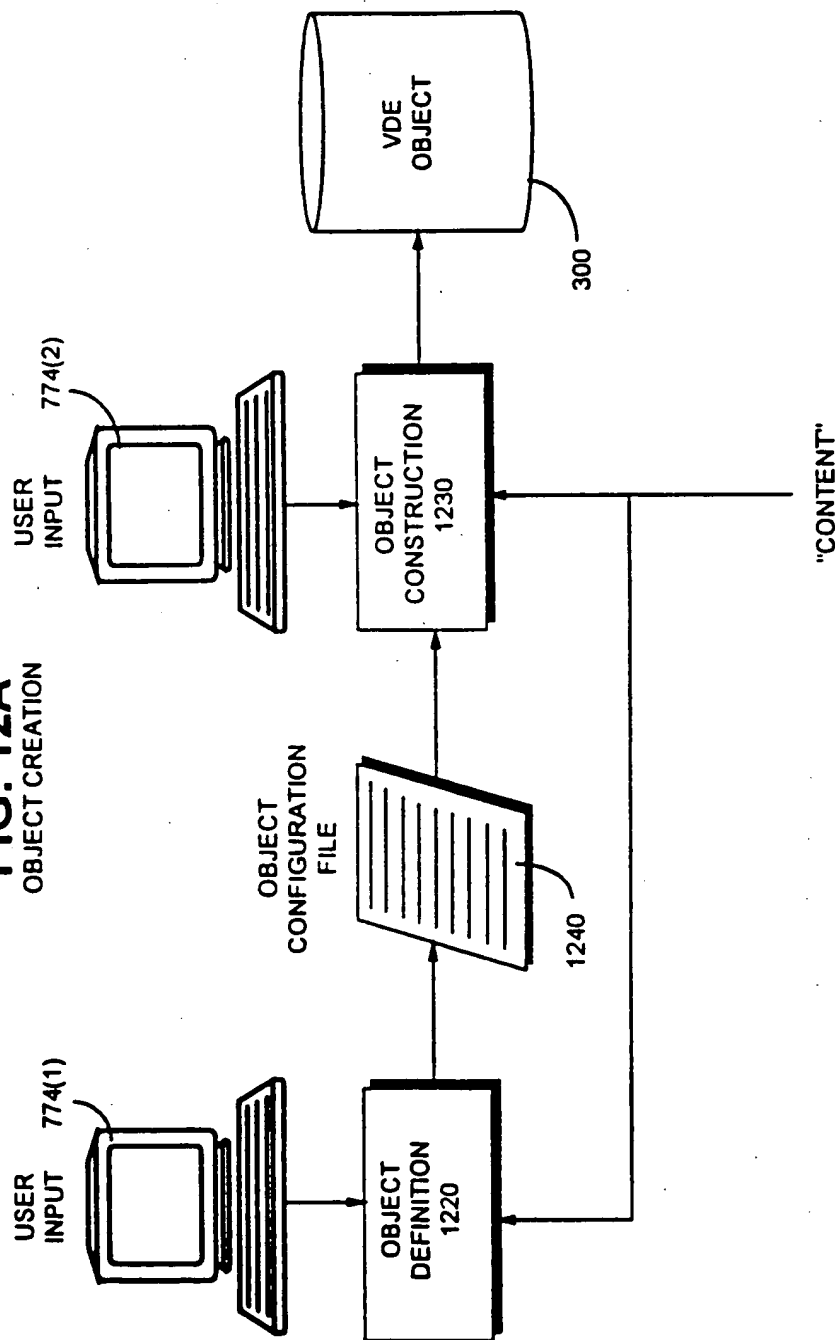
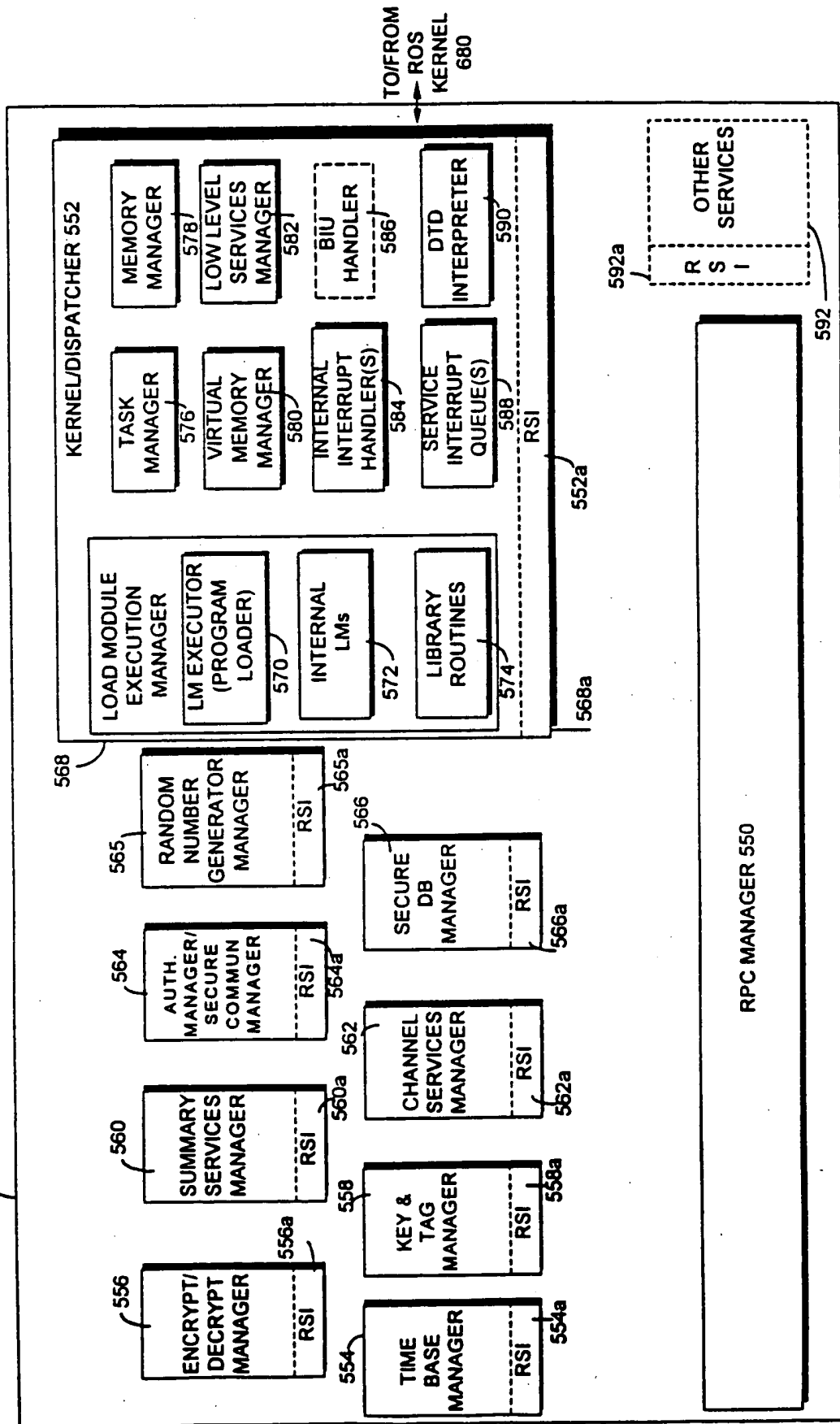


FIG. 13

PROTECTED PROCESSING ENVIRONMENT 650

503, 655





**FIG. 14B**

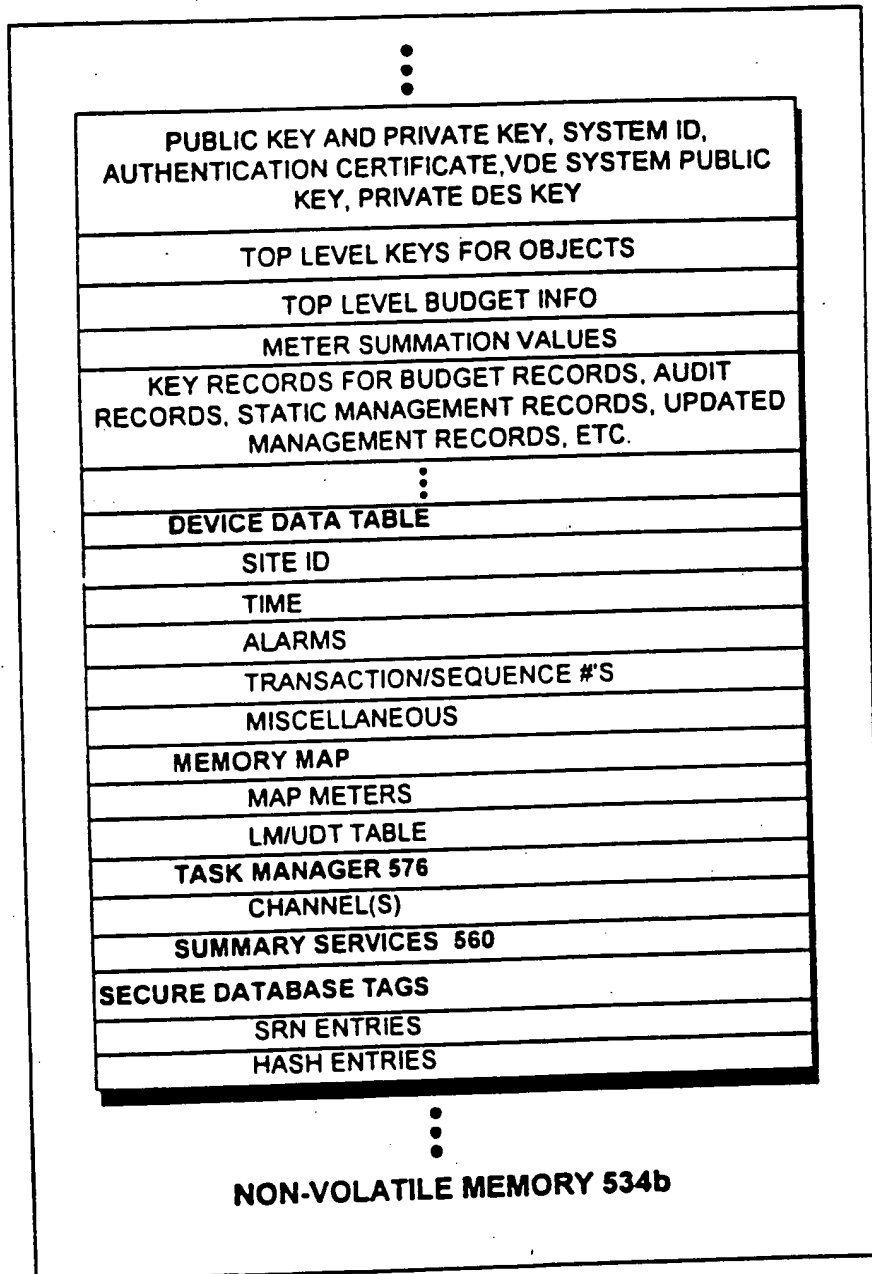
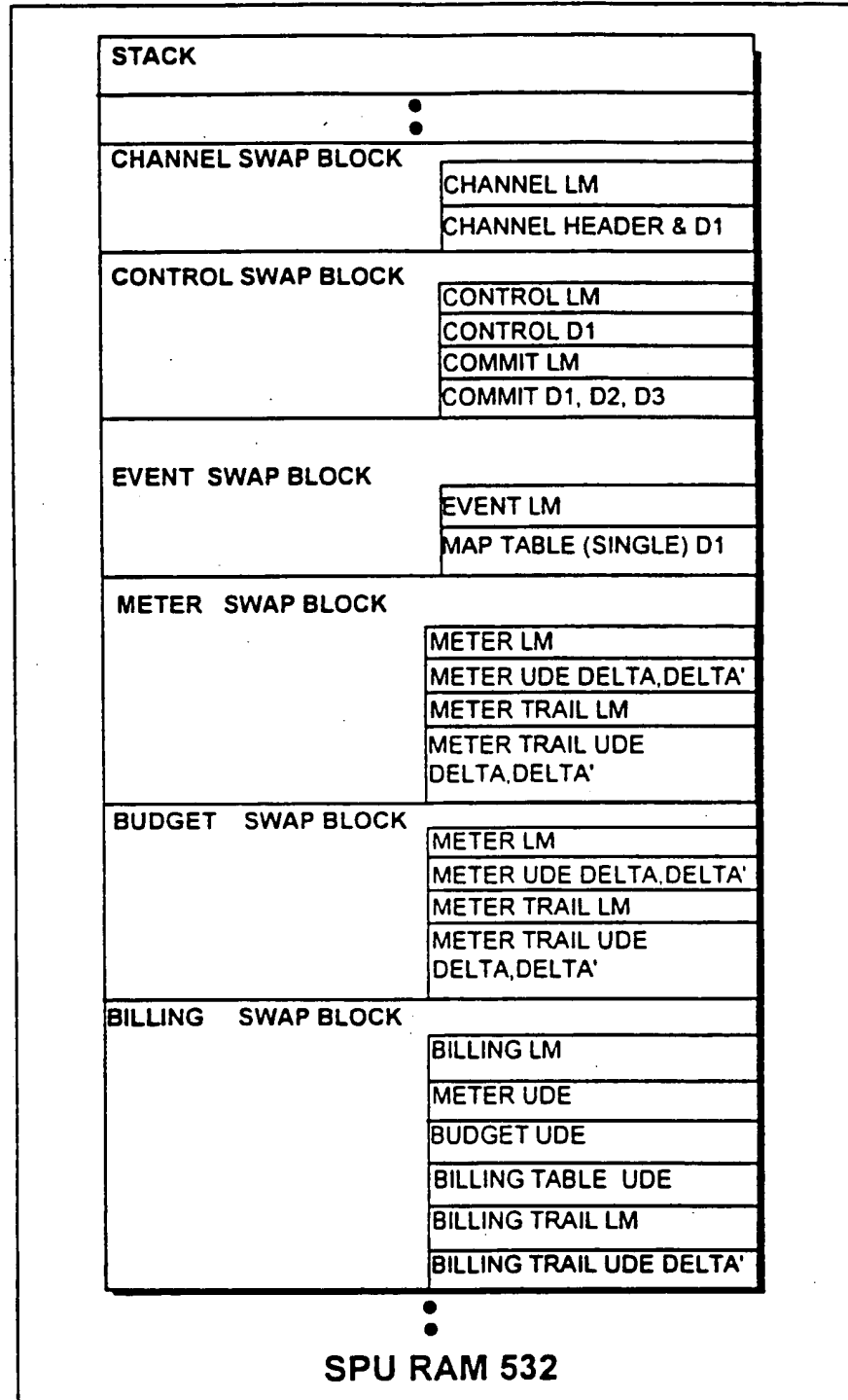
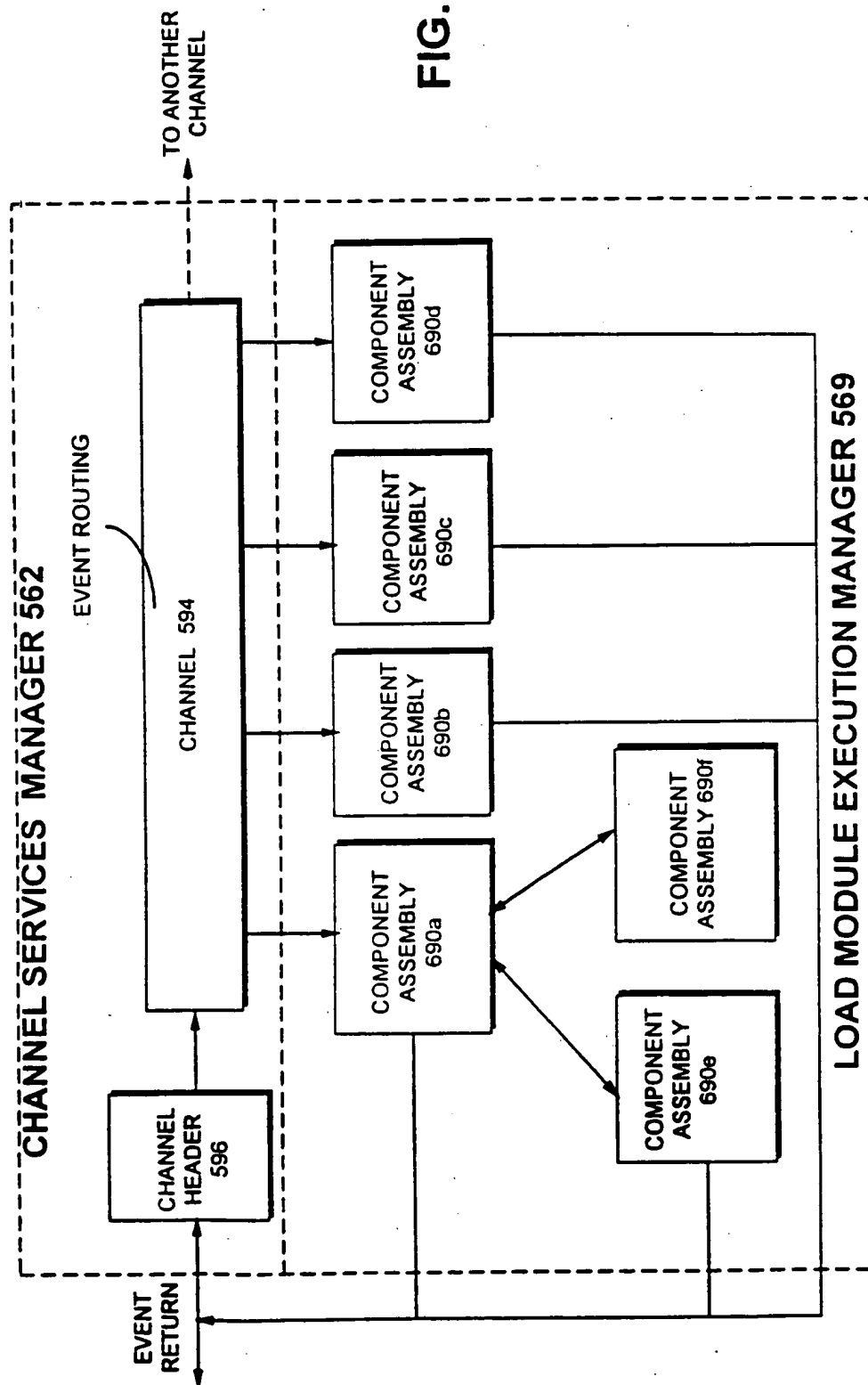


FIG. 14C

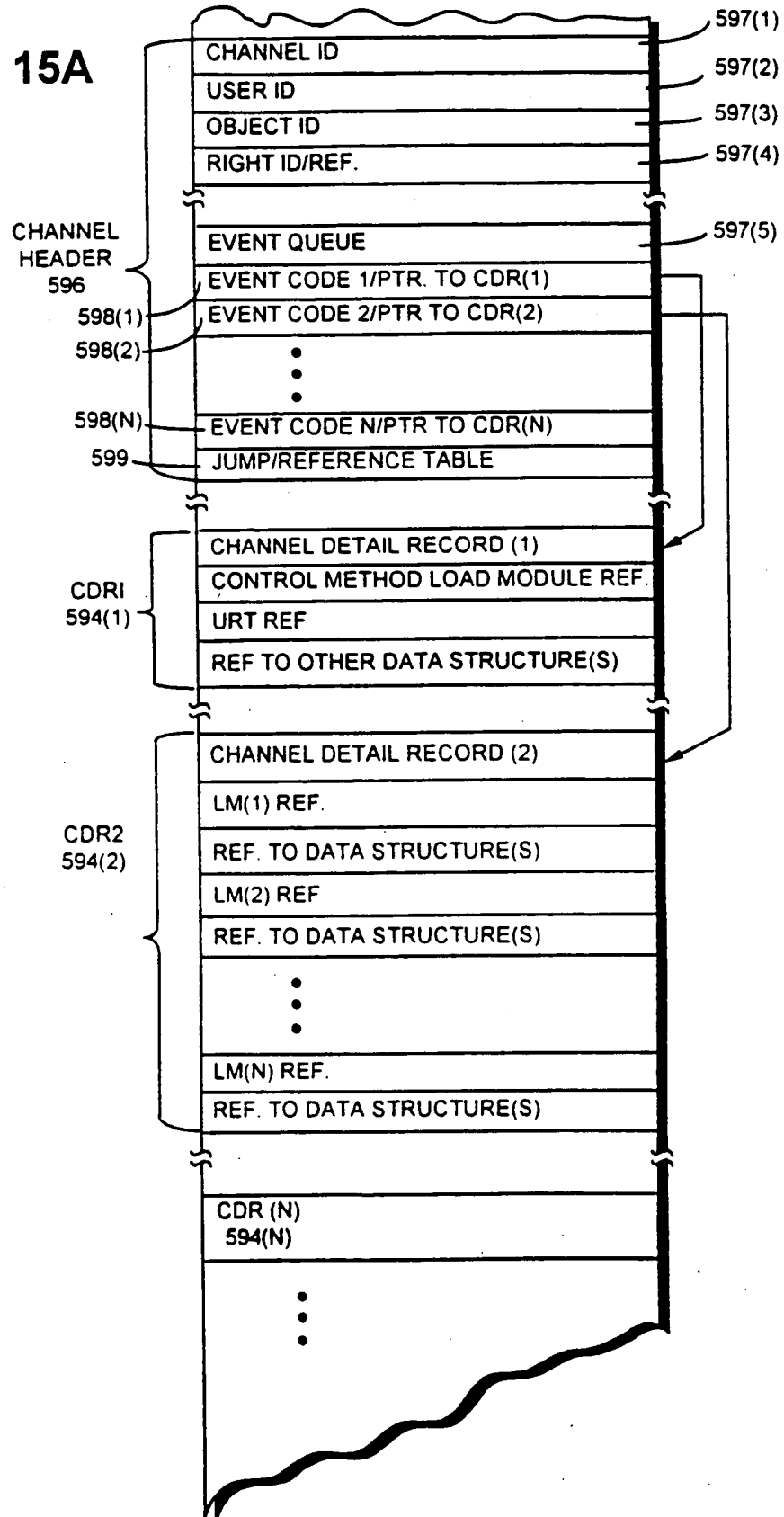






**FIG. 15**

FIG. 15A



**FIG. 15B**

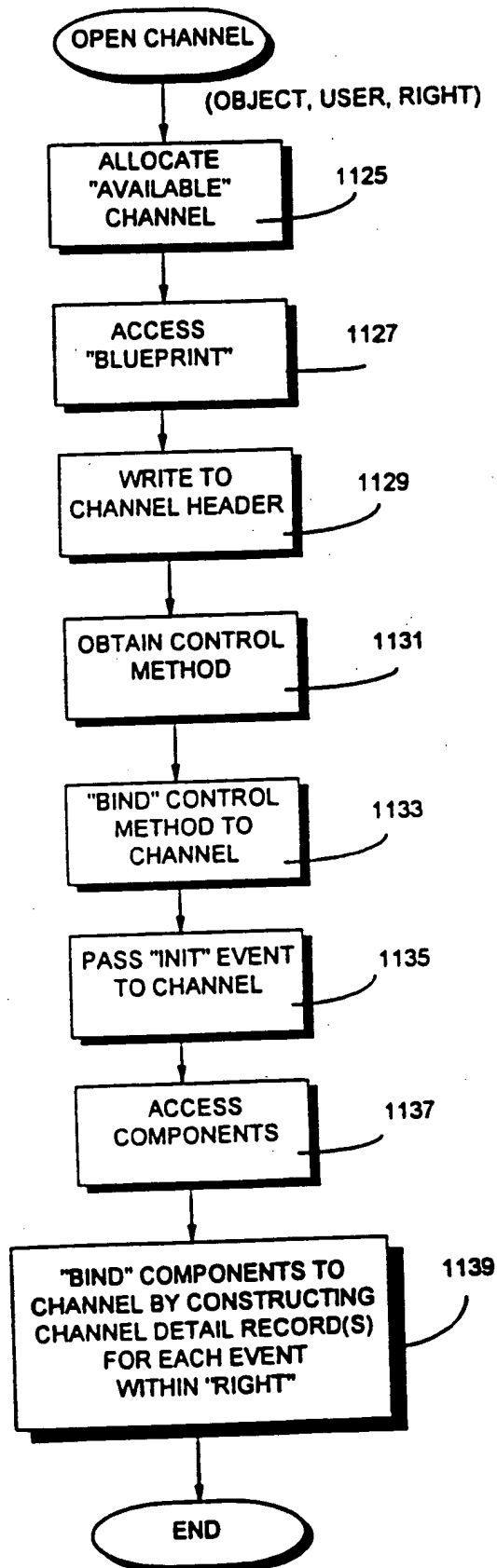
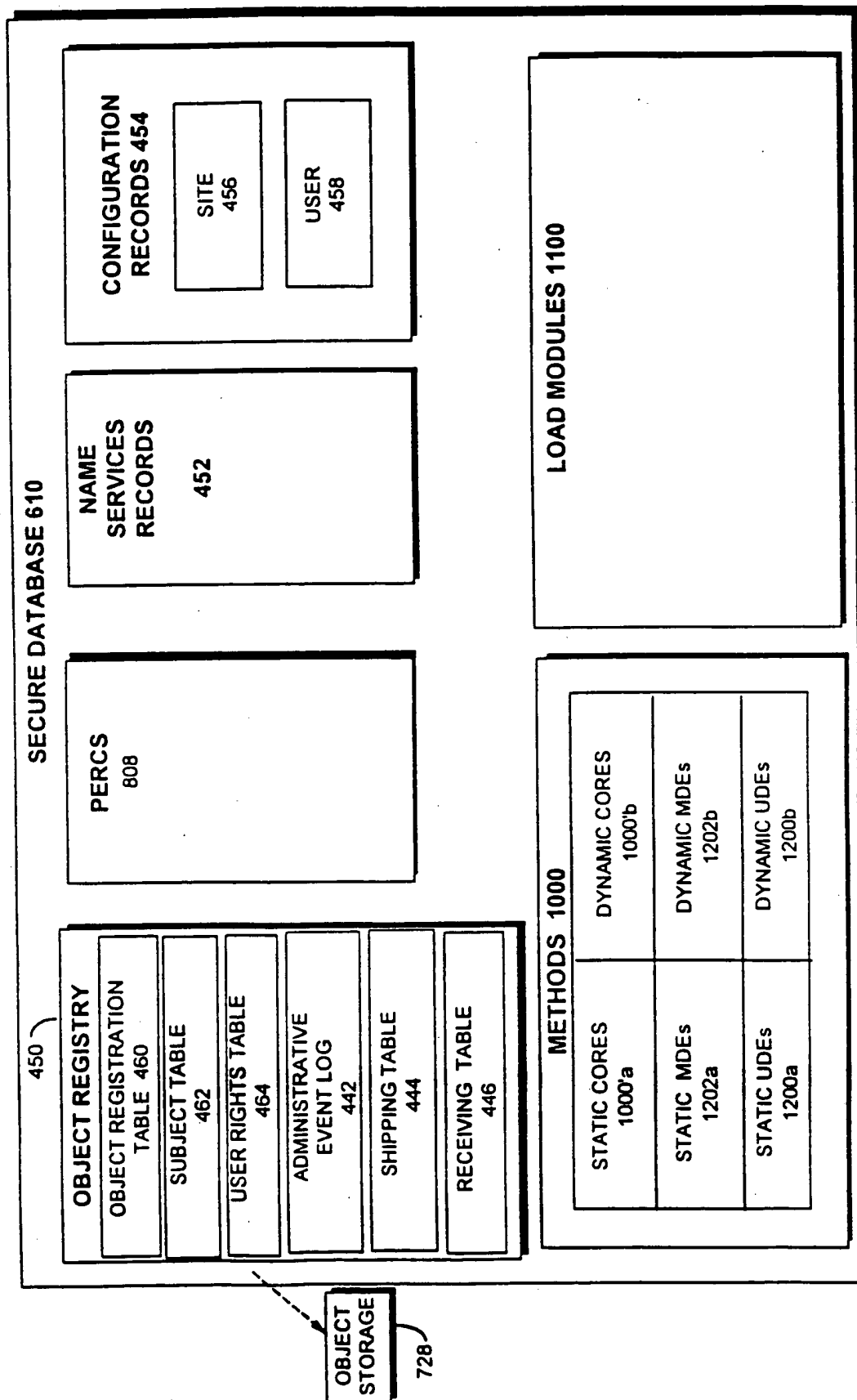
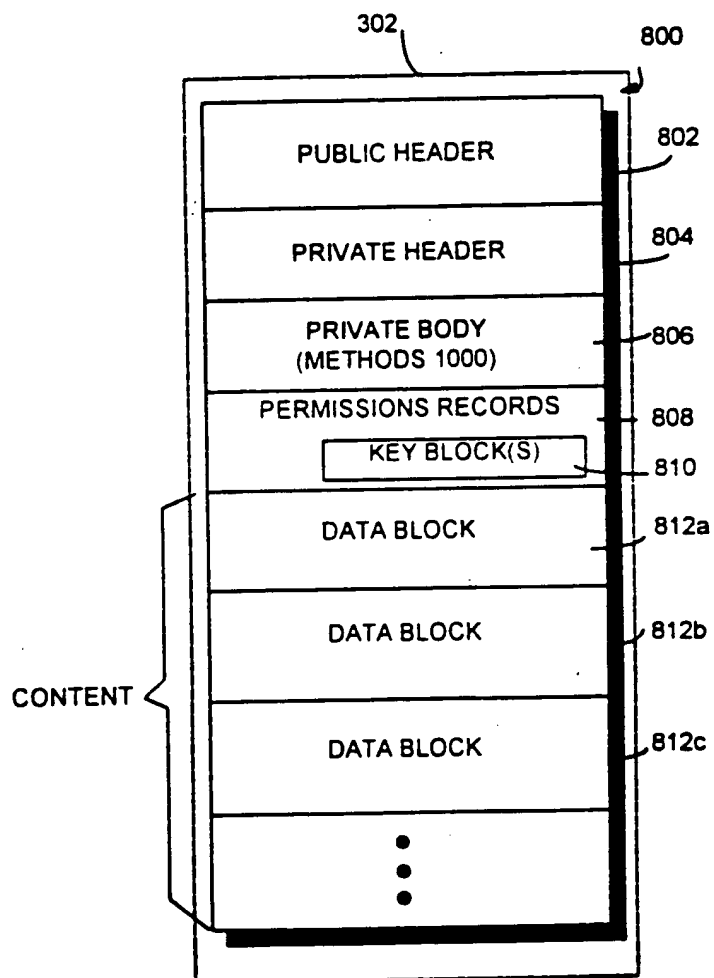


FIG. 16

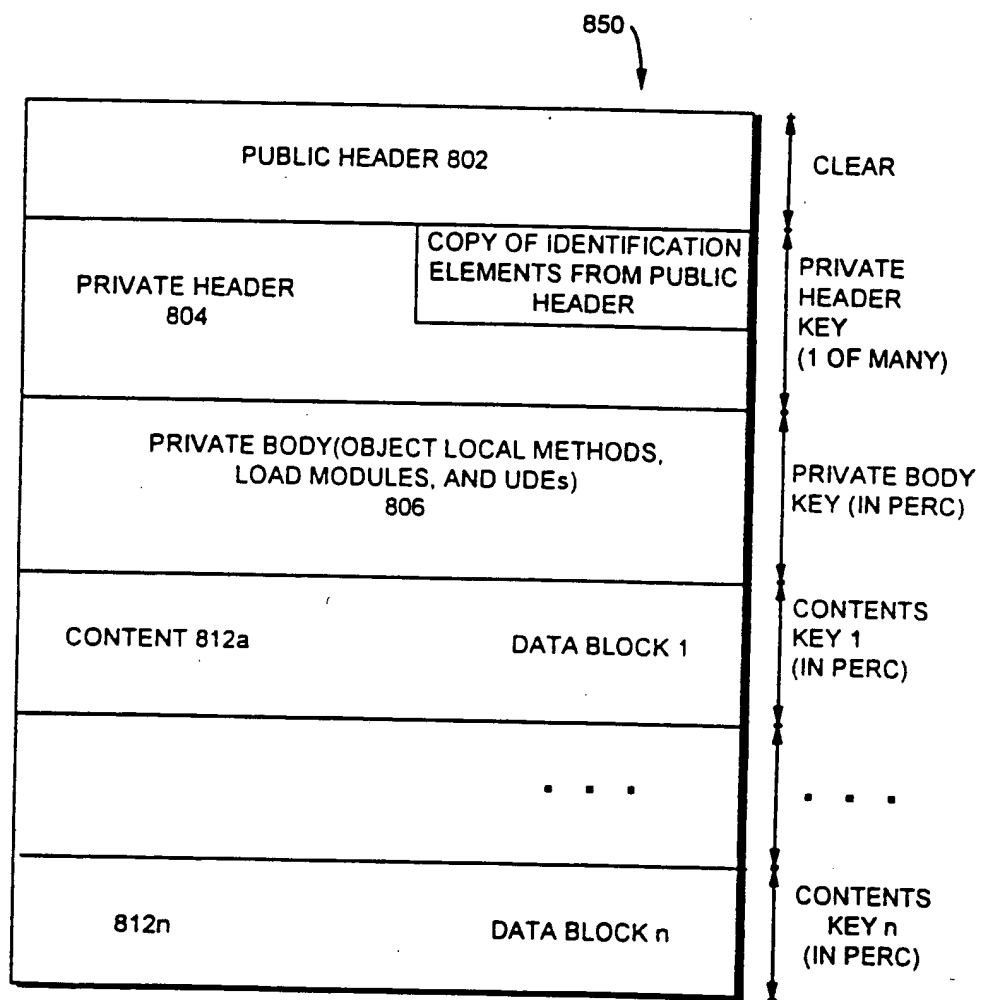




## LOGICAL OBJECT

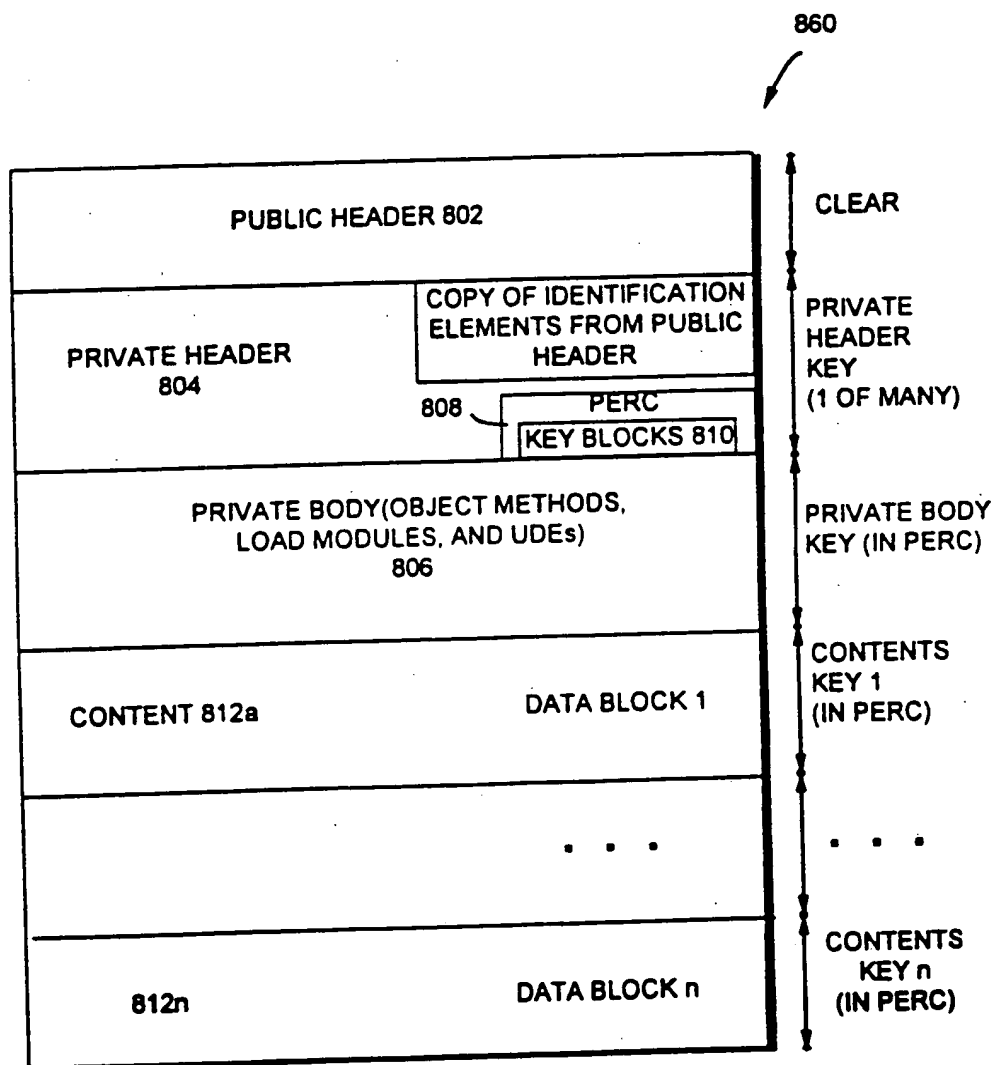
FIG. 17

FIG. 18



STATIONARY OBJECT

FIG. 18



TRAVELING OBJECT

FIG. 19

880

PUBLIC HEADER 802

PRIVATE HEADER 804

COPY OF IDENTIFICATION ELEMENTS FROM PUBLIC HEADER

PRIVATE BODY(OBJECT LOCAL METHODS, LOAD MODULES, AND UDEs) 806

CONTENT 812a

DATA BLOCK 1

ADMINISTRATIVE OBJECT 812b

CONTENT CONTAINER

INFORMATION

CONTENT

PERMISSIONS

RECORD

BUDGETS

METHODS

EMBEDDED CONTENT OBJECT

812n

DATA BLOCK n

CLEAR

PRIVATE HEADER KEY (1 OF MANY)

PRIVATE BODY KEY (IN PERC)

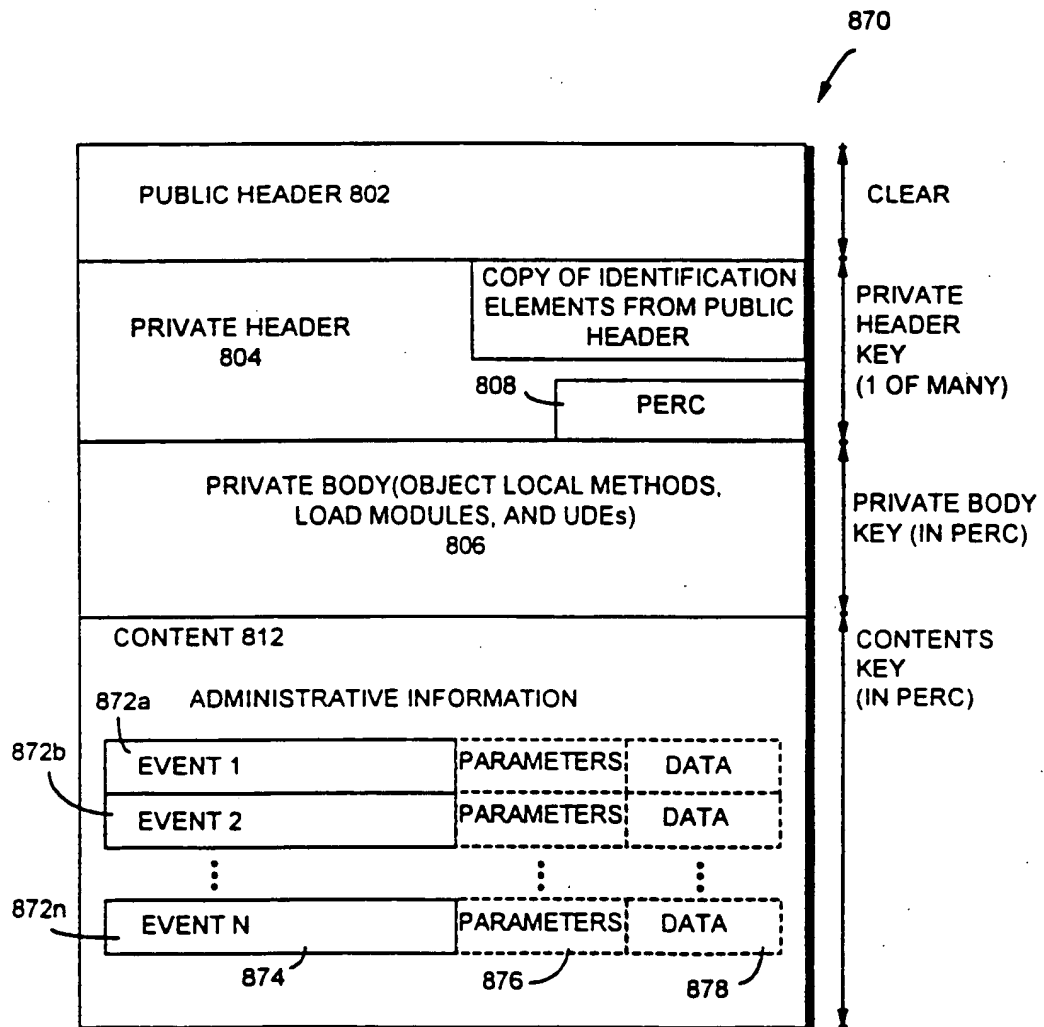
CONTENTS KEY 1 (IN PERC)

CONTENTS KEY n (IN PERC)

FIG. 20



FIG. 21



ADMINISTRATIVE OBJECT

FIG. 21

# FIG. 22

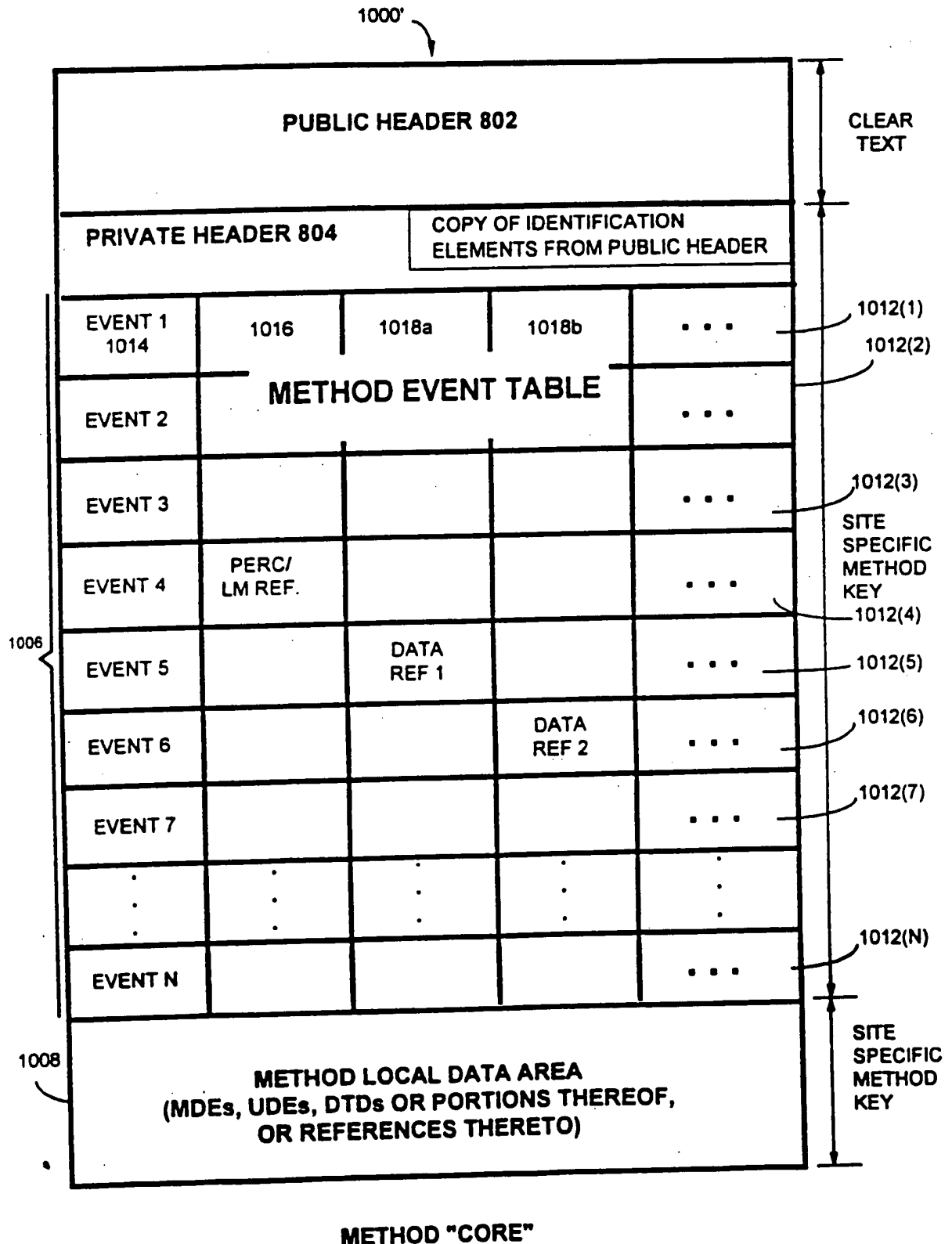
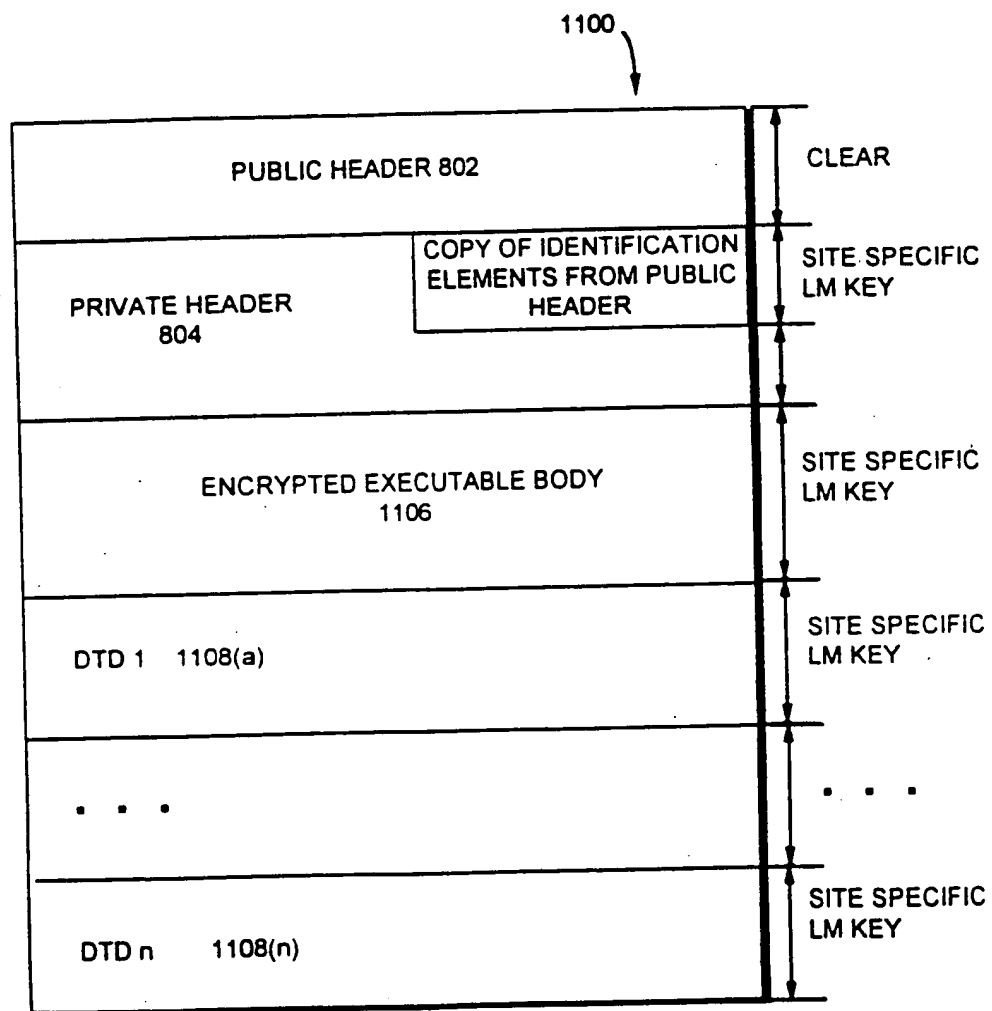
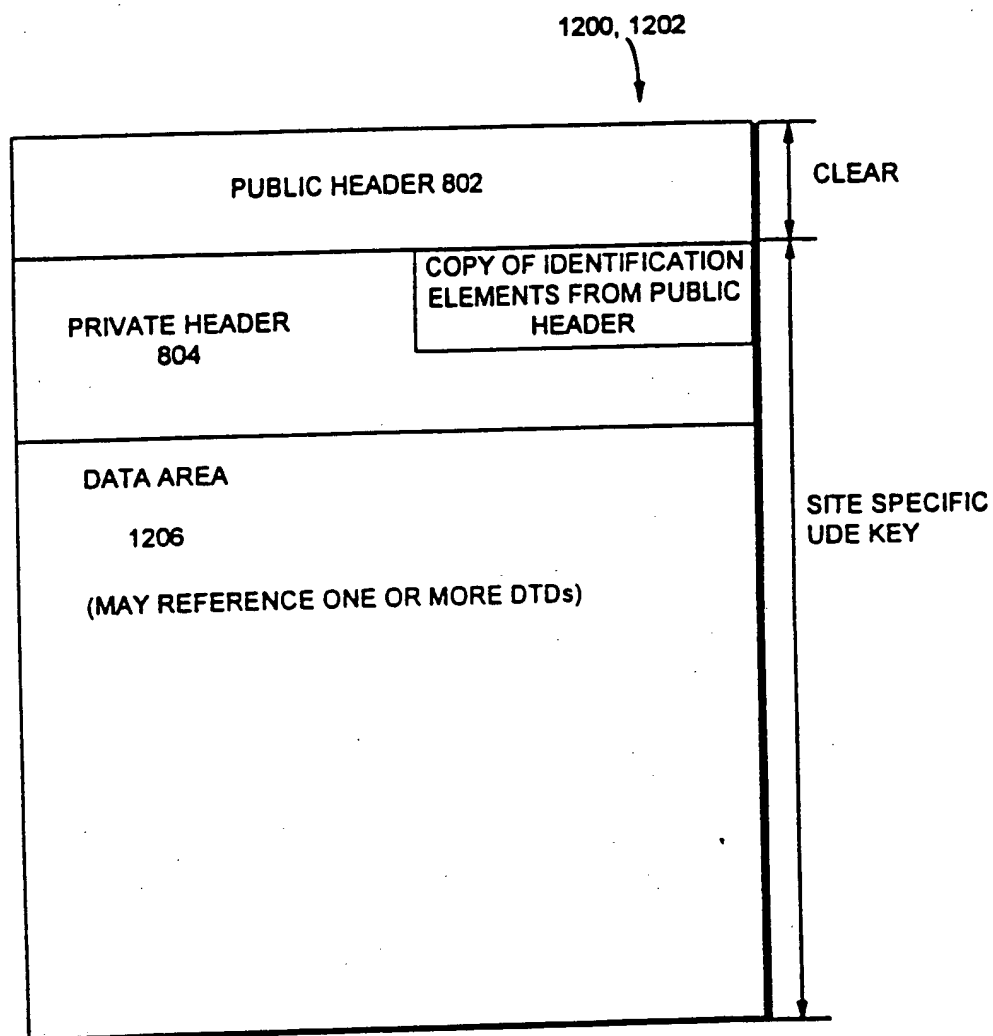


FIG. 23



LOAD MODULE

FIG. 24



UDE (MDE)

FIG. 25A

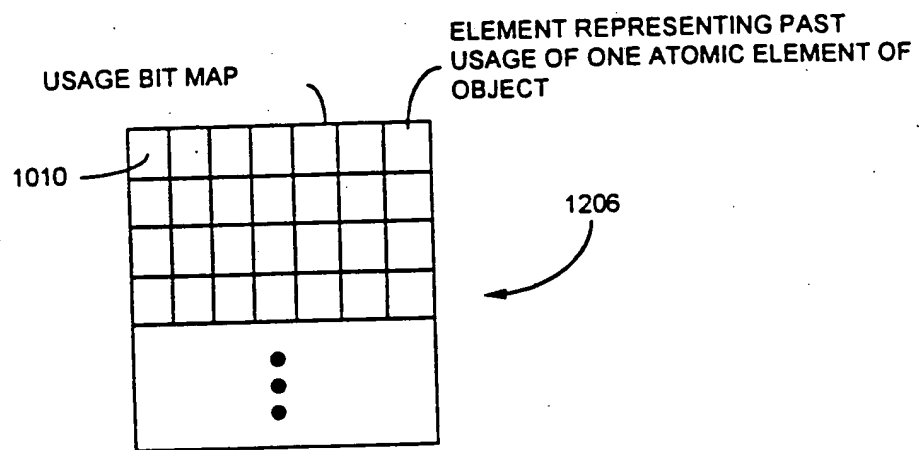


FIG. 25B

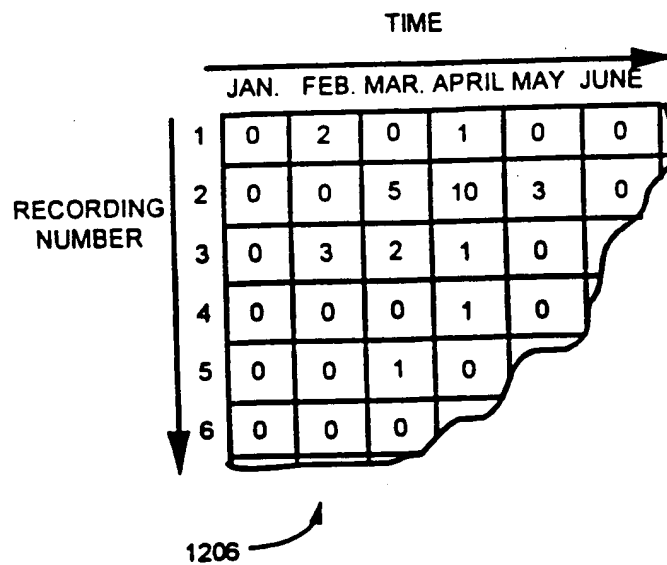


FIG. 25C

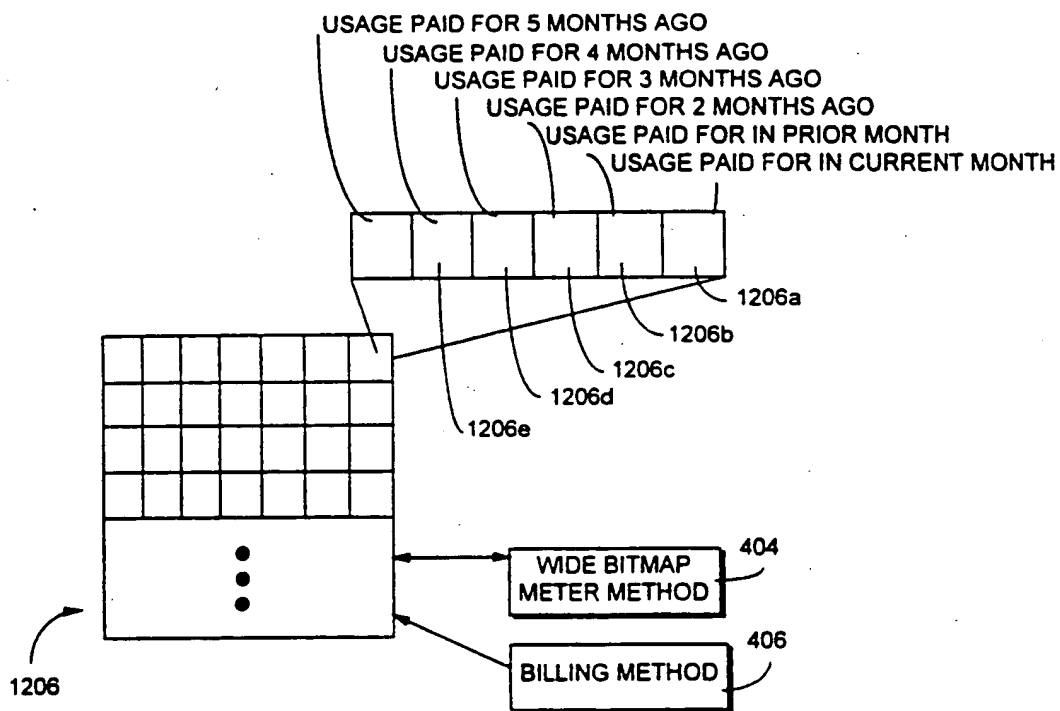
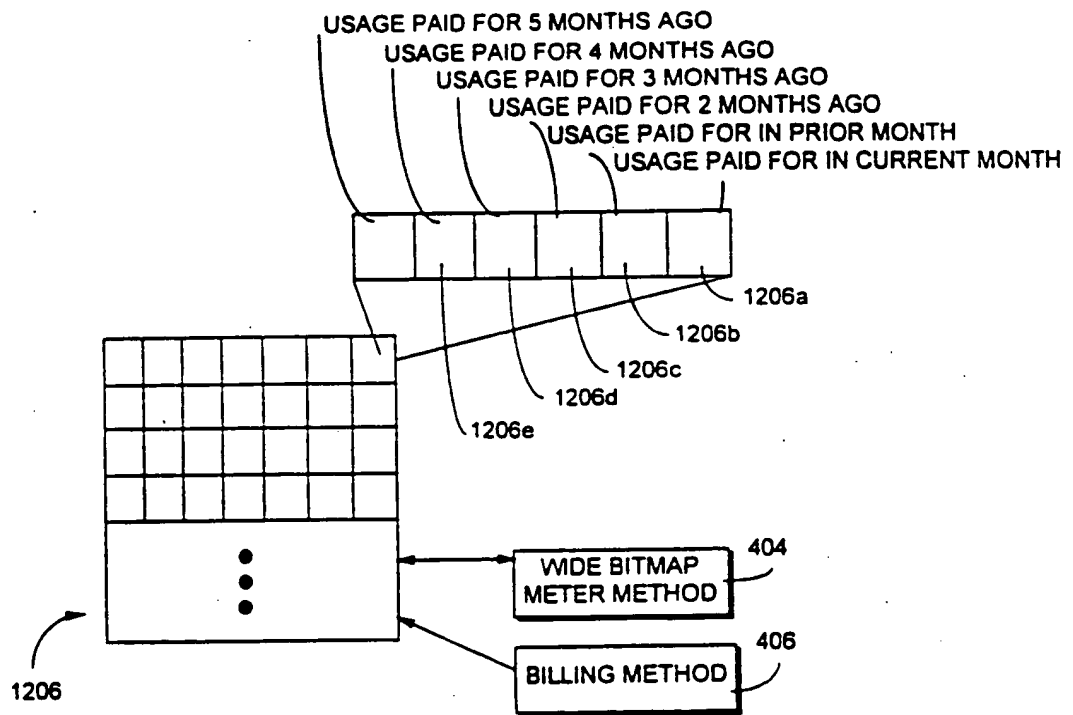
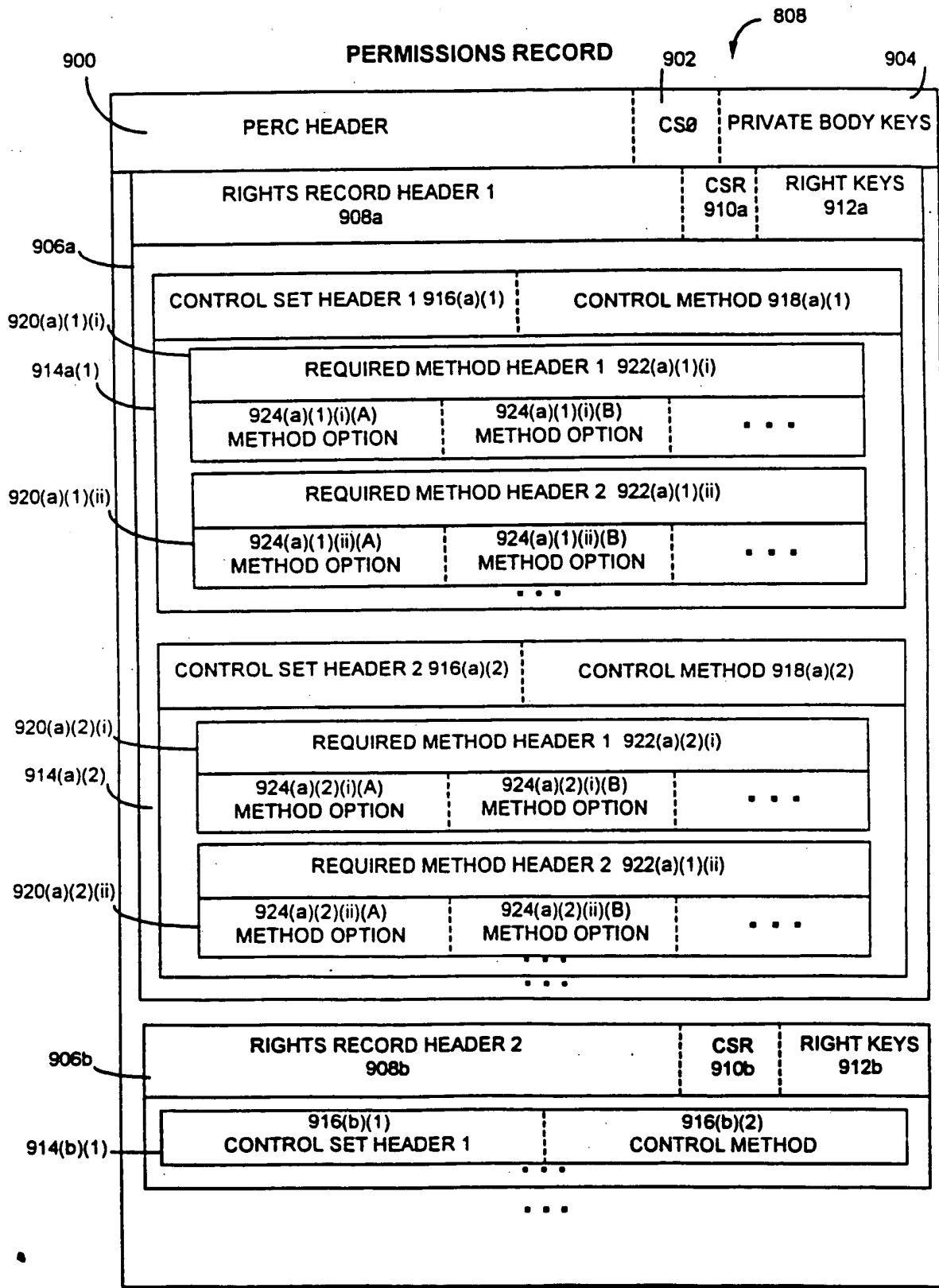


FIG. 25C

FIG. 25C

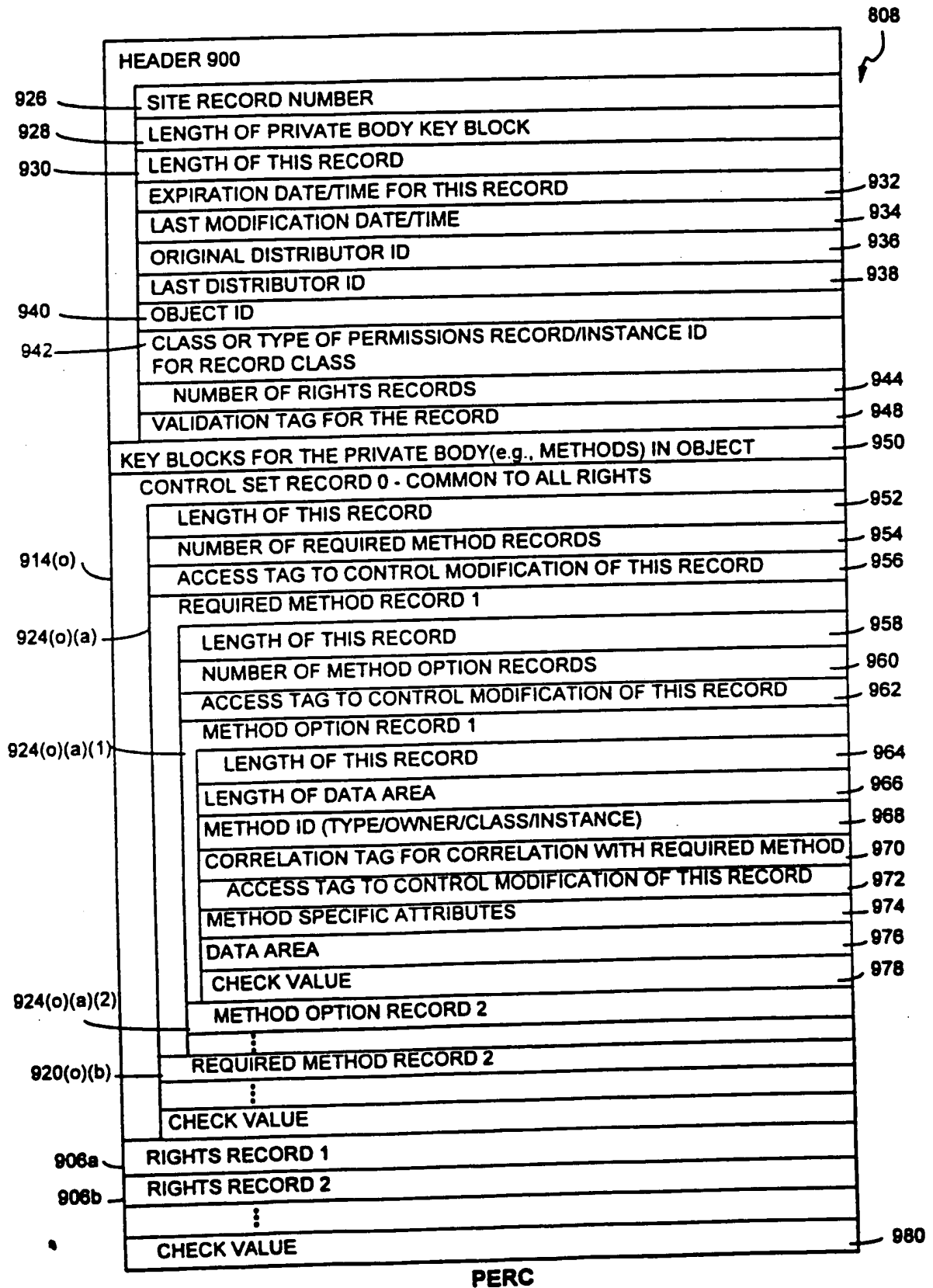


# FIG. 26

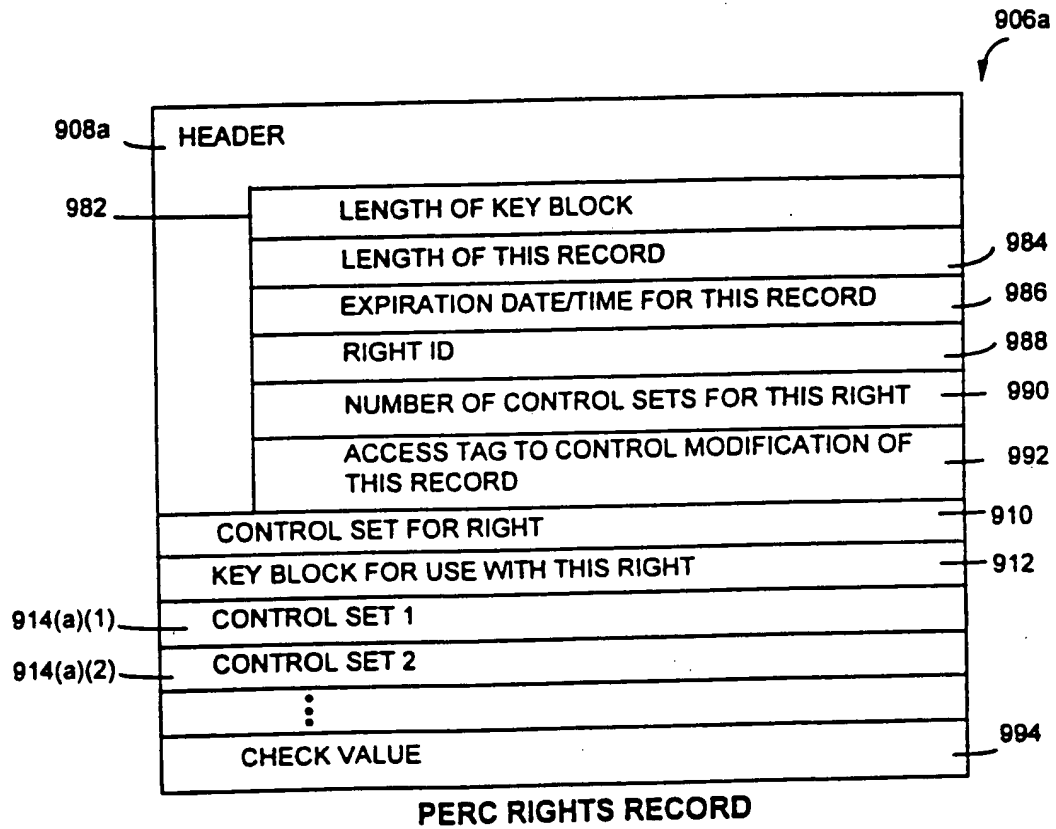




# FIG. 26A



**FIG. 26B**



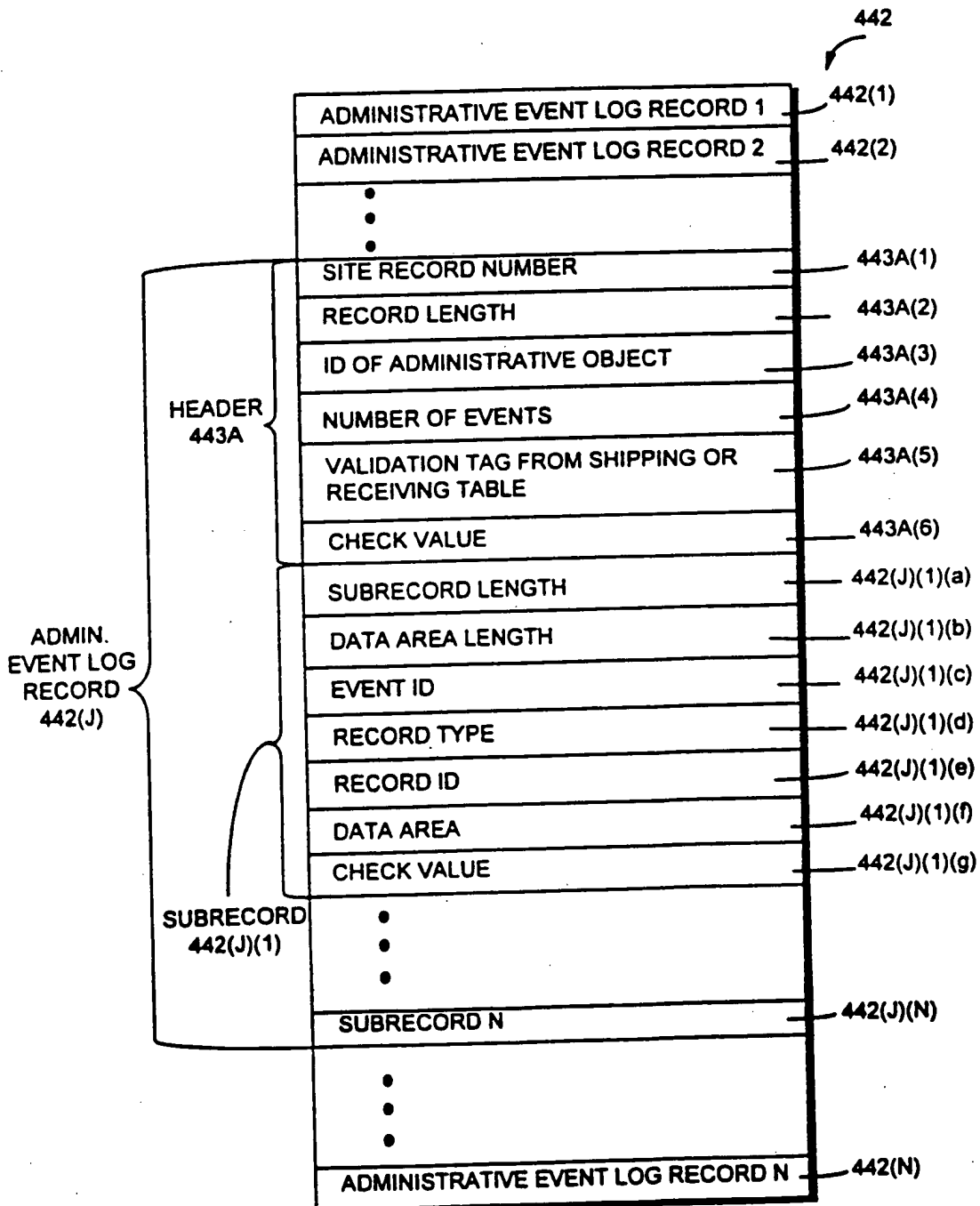
**FIG. 27**  
SHIPPING TABLE

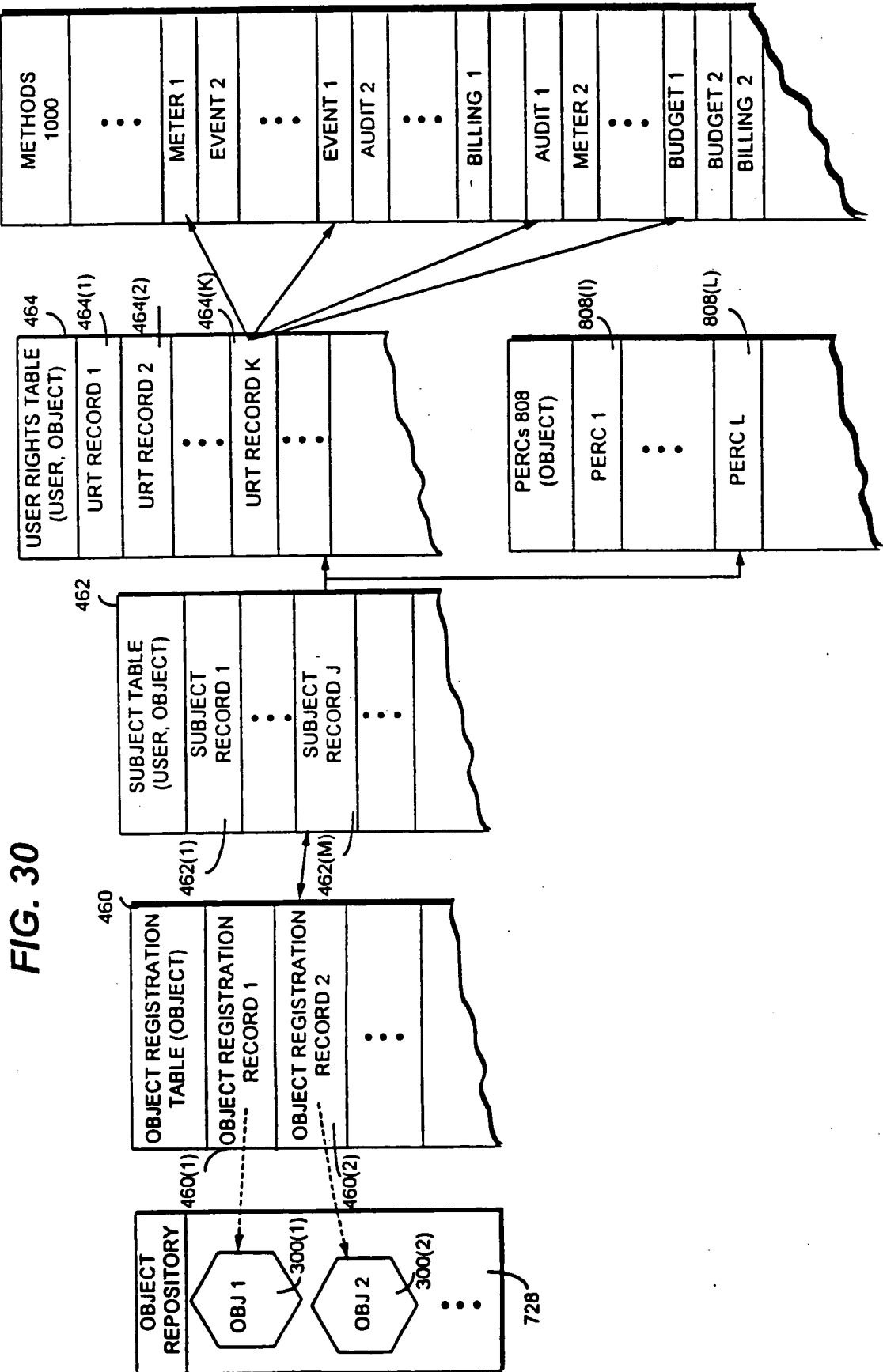
		444A(1)	
HEADER 444A	SITE RECORD NUMBER		444
	USER (GROUP) ID		444A(2)
	REF. TO "FIRST" COMPLETED OUTGOING SHIPPING RECORD		444A(3)
	REF. TO "LAST" COMPLETED OUTGOING SHIPPING RECORD		444A(4)
	REF. TO "FIRST" SCHEDULED OUTGOING SHIPPING RECORD		444A(5)
	REF. TO "LAST" SCHEDULED OUTGOING SHIPPING RECORD		444A(6)
	VALIDATION TAG FROM NAME SERVICES RECORD		444A(7)
	VALIDATION TAG FOR "FIRST" OUTGOING SHIPPING RECORD(S)		444A(8)
	CHECK VALUE		444A(9)
SHIPPING RECORD 445(1)	SITE RECORD NUMBER		445(1)(A)
	FIRST DATE/TIME FOR SCHEDULED SHIPMENT		445(1)(B)
	LAST DATE/TIME FOR SCHEDULED SHIPMENT		445(1)(C)
	ACTUAL DATE/TIME OF COMPLETED SHIPMENT		445(1)(D)
	OBJECT ID OF ADMINISTRATIVE OBJECT (TO BE) SHIPPED		445(1)(E)
	REF. TO ENTRY IN ADMINISTRATIVE EVENT LOG		445(1)(F)
	REF. TO NAME SERVICES RECORD NAMING RECIPIENT		445(1)(G)
	PURPOSE OF SHIPMENT		445(1)(H)
	STATUS OF SHIPMENT		445(1)(I)
	REF. TO "PREVIOUS" OUTGOING SHIPPING RECORD		445(1)(J)
	REF. TO "NEXT" OUTGOING SHIPPING RECORD		445(1)(K)
	VALIDATION TAG FROM HEADER		445(1)(L)
	VALIDATION TAG TO ADMINISTRATIVE EVENT LOG		445(1)(M)
	VALIDATION TAG TO NAME SERVICES RECORD		445(1)(N)
	VALIDATION TAG FROM PREVIOUS RECORD		445(1)(O)
	VALIDATION TAG TO NEXT RECORD		445(1)(P)
	CHECK VALUE		445(1)(Q)
	⋮		
	SHIPPING RECORD N		445(1)(R)

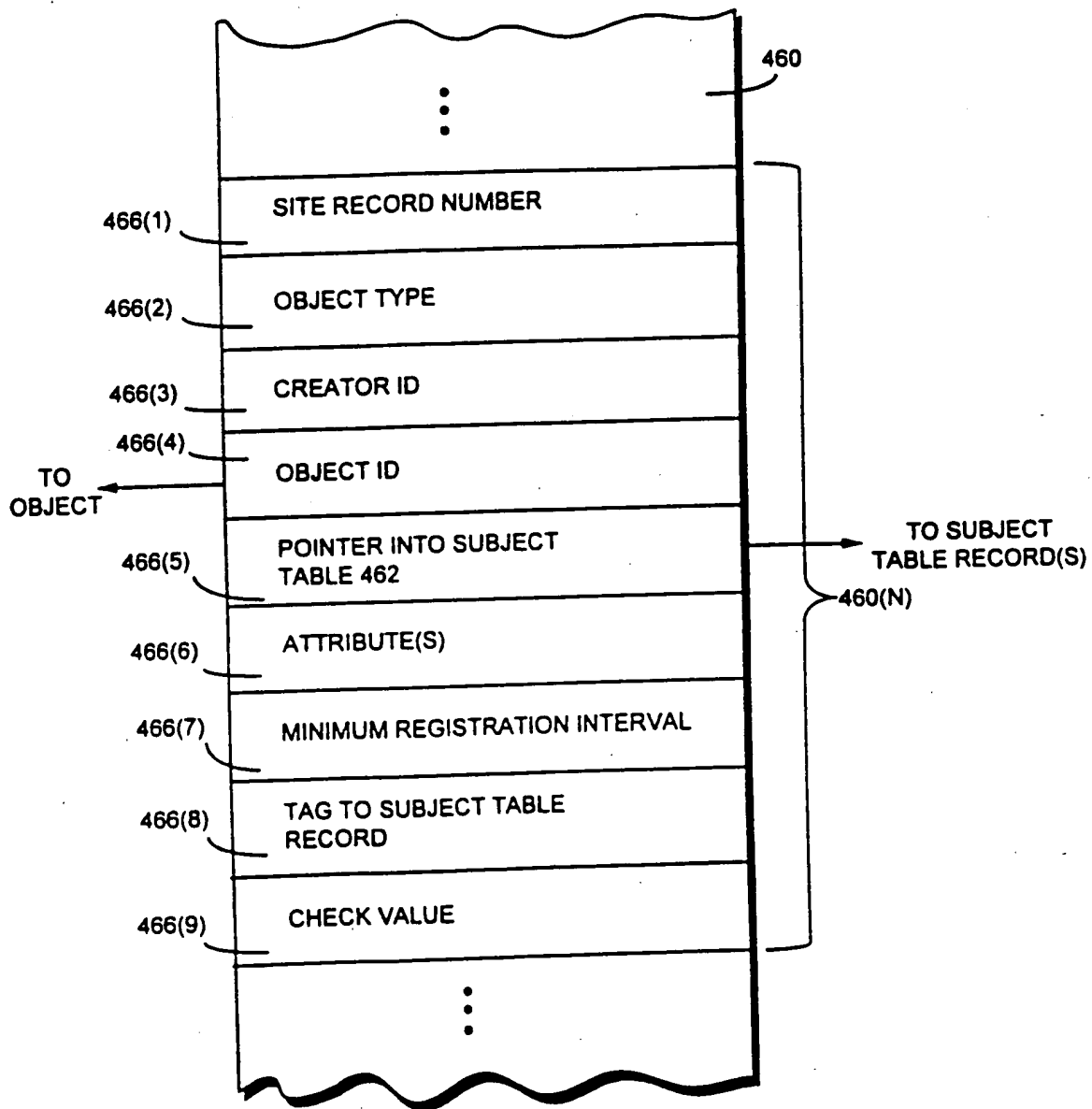
**FIG. 28**  
RECEIVING TABLE

		446A(1)	
HEADER 446A	SITE RECORD NUMBER		446
	USER (GROUP) ID		446A(2)
	REF. TO "FIRST" COMPLETED INCOMING RECEIVING RECORD		446A(3)
	REF. TO "LAST" COMPLETED INCOMING RECEIVING RECORD		446A(4)
	REF. TO "FIRST" SCHEDULED INCOMING RECEIVING RECORD		446A(5)
	REF. TO "LAST" SCHEDULED INCOMING RECEIVING RECORD		446A(6)
	VALIDATION TAG FROM NAME SERVICES RECORD		446A(7)
	VALIDATION TAG FOR "FIRST" INCOMING RECEIVING RECORD(S)		446A(8)
	CHECK VALUE		446A(9)
RECEIVING RECORD 447(1)	SITE RECORD NUMBER		447(1)(A)
	FIRST DATE/TIME FOR SCHEDULED RECEPTION		447(1)(B)
	LAST DATE/TIME FOR SCHEDULED RECEPTION		447(1)(C)
	ACTUAL DATE/TIME OF COMPLETED RECEPTION		447(1)(D)
	OBJECT ID OF ADMINISTRATIVE OBJECT (TO BE) RECEIVED		447(1)(E)
	REF. TO ENTRY IN ADMINISTRATIVE EVENT LOG		447(1)(F)
	REF. TO NAME SERVICES RECORD NAMING SENDER		447(1)(G)
	PURPOSE OF RECEPTION		447(1)(H)
	STATUS OF RECEPTION		447(1)(I)
	REF. TO "PREVIOUS" INCOMING RECEIVING RECORD		447(1)(J)
	REF. TO "NEXT" INCOMING RECEIVING RECORD		447(1)(K)
	VALIDATION TAGS		447(1)(L)
	CHECK VALUE		447(1)(M)
	⋮		
	RECEIVING RECORD N		447(2)

**FIG. 29**  
ADMINISTRATIVE EVENT LOG







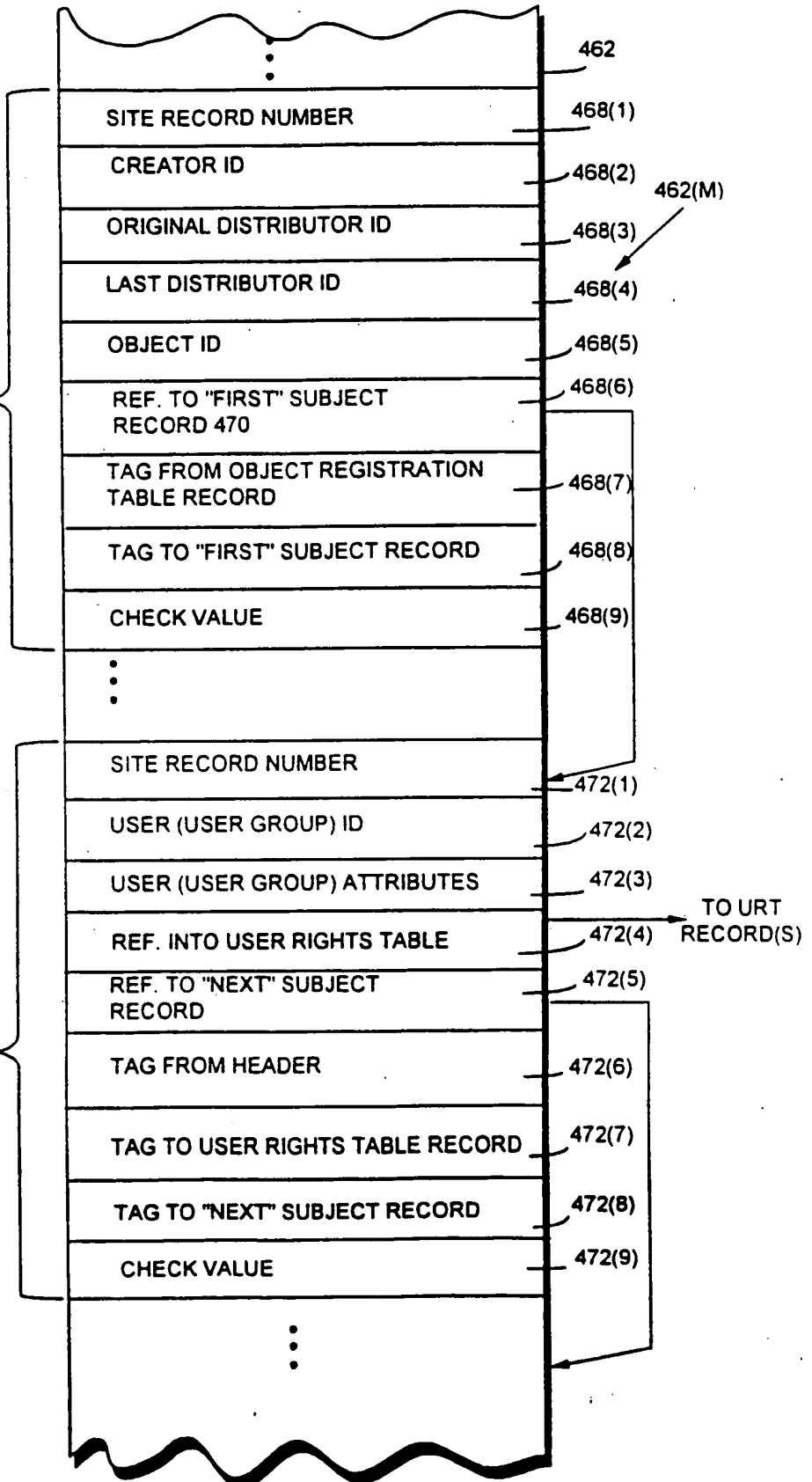
**FIG. 31**  
OBJECT REGISTRATION TABLE

**FIG. 32**

SUBJECT  
TABLE

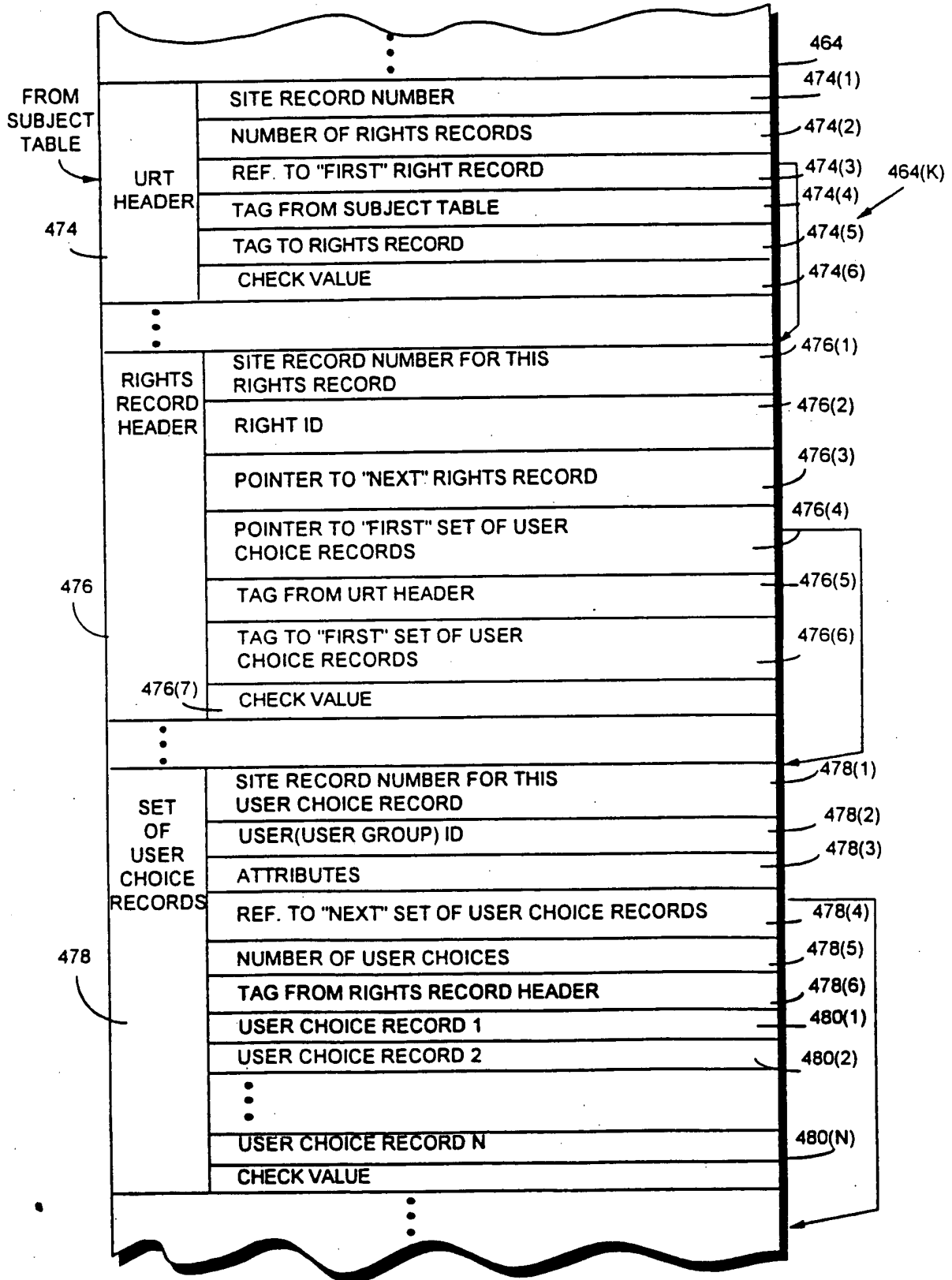
"HEADER"  
468

SUBJECT  
RECORD  
470(1)





**FIG. 33** USER RIGHTS TABLE



**FIG. 34A**

**SITE RECORD**

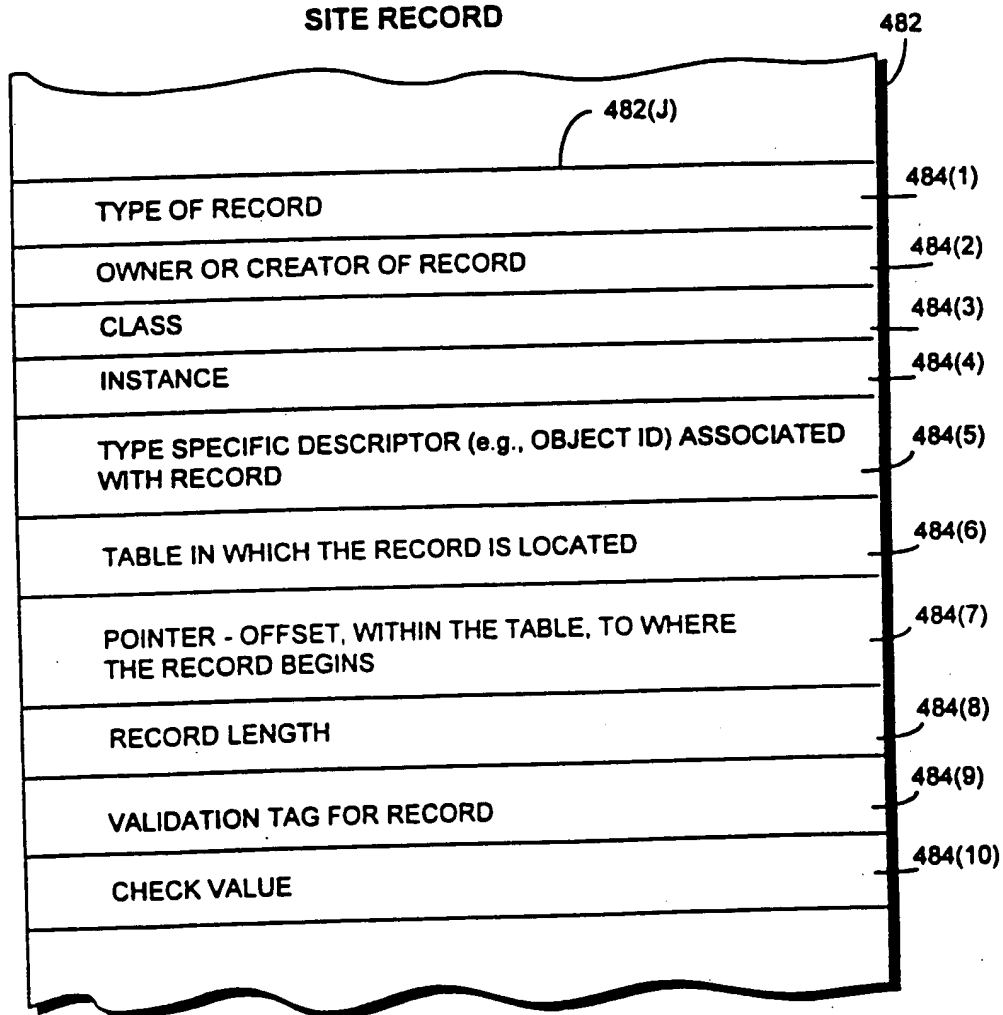
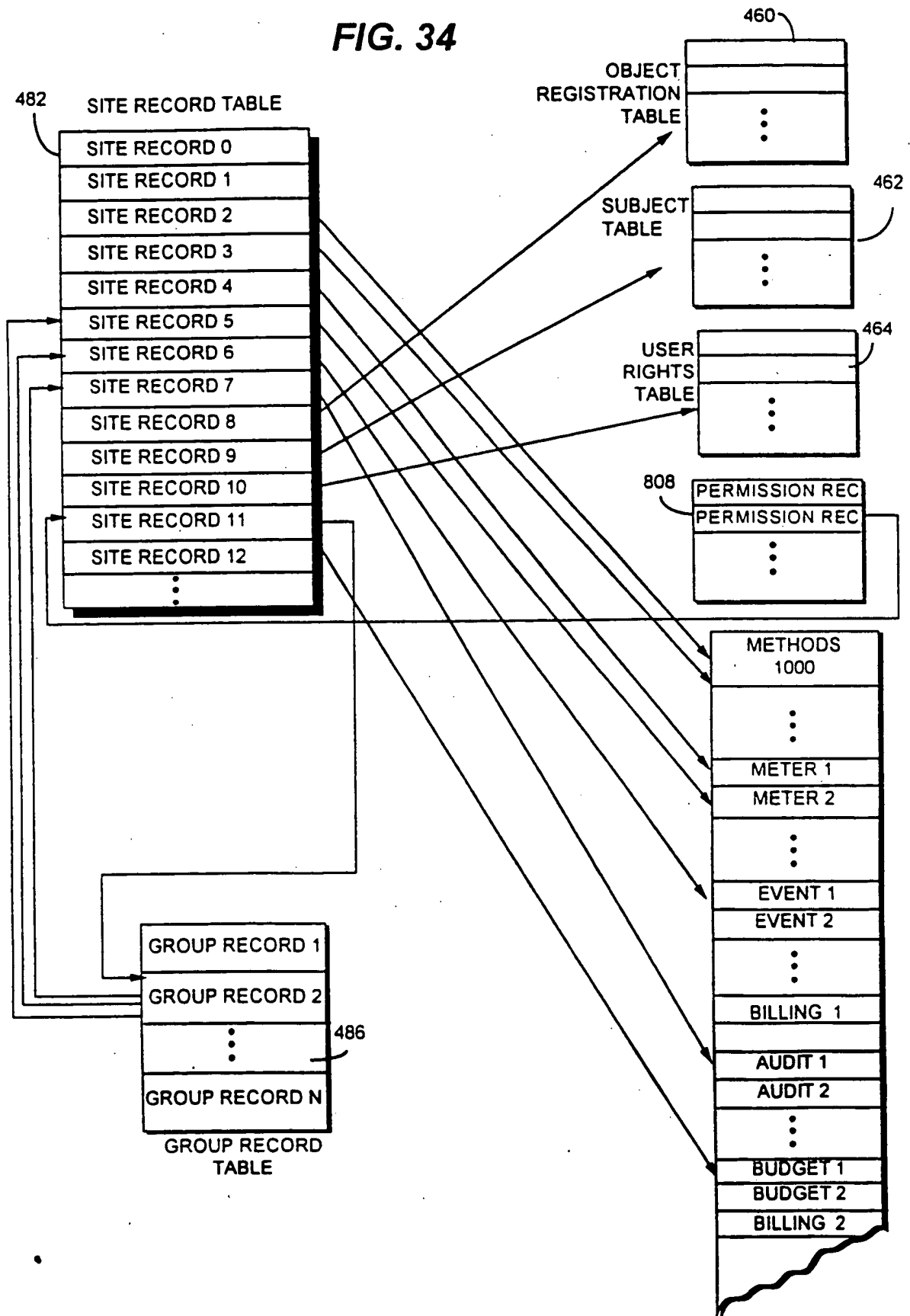


FIG. 34



**FIG. 34B**

**GROUP RECORD**

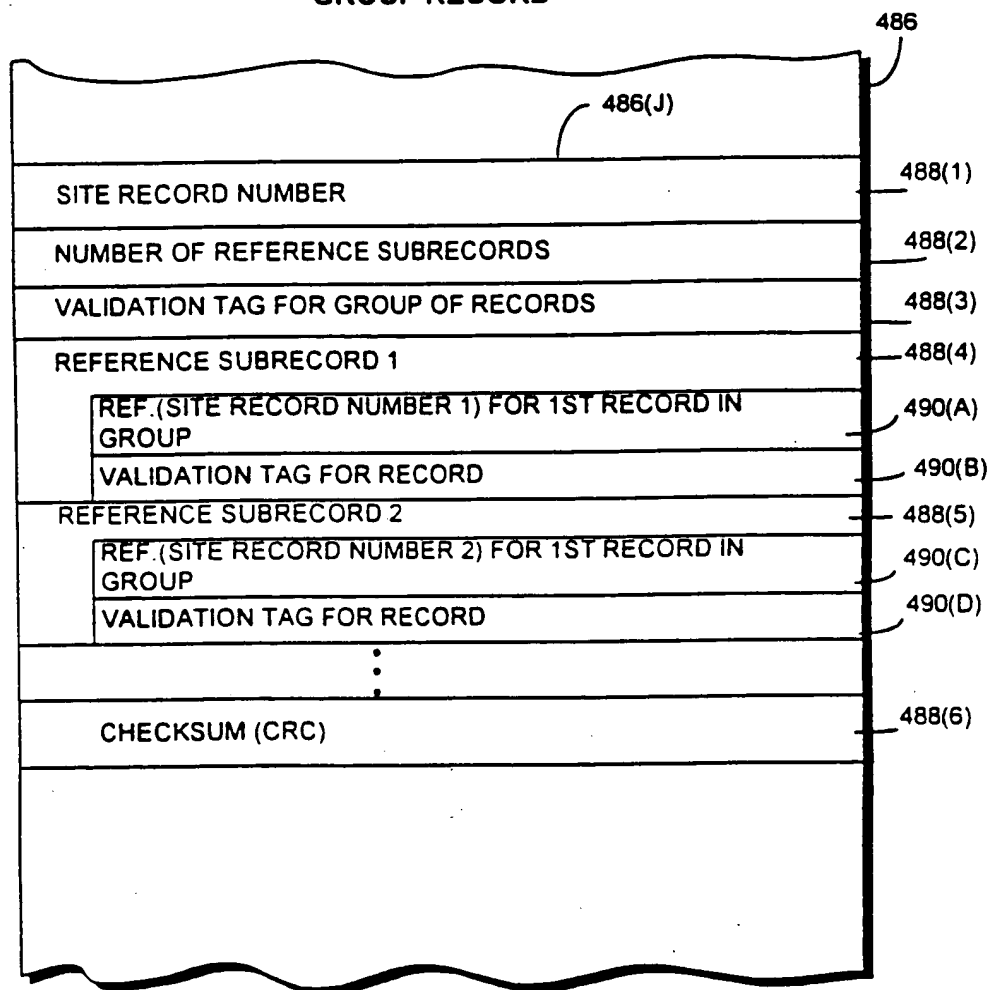


FIG. 34B

FIG. 35

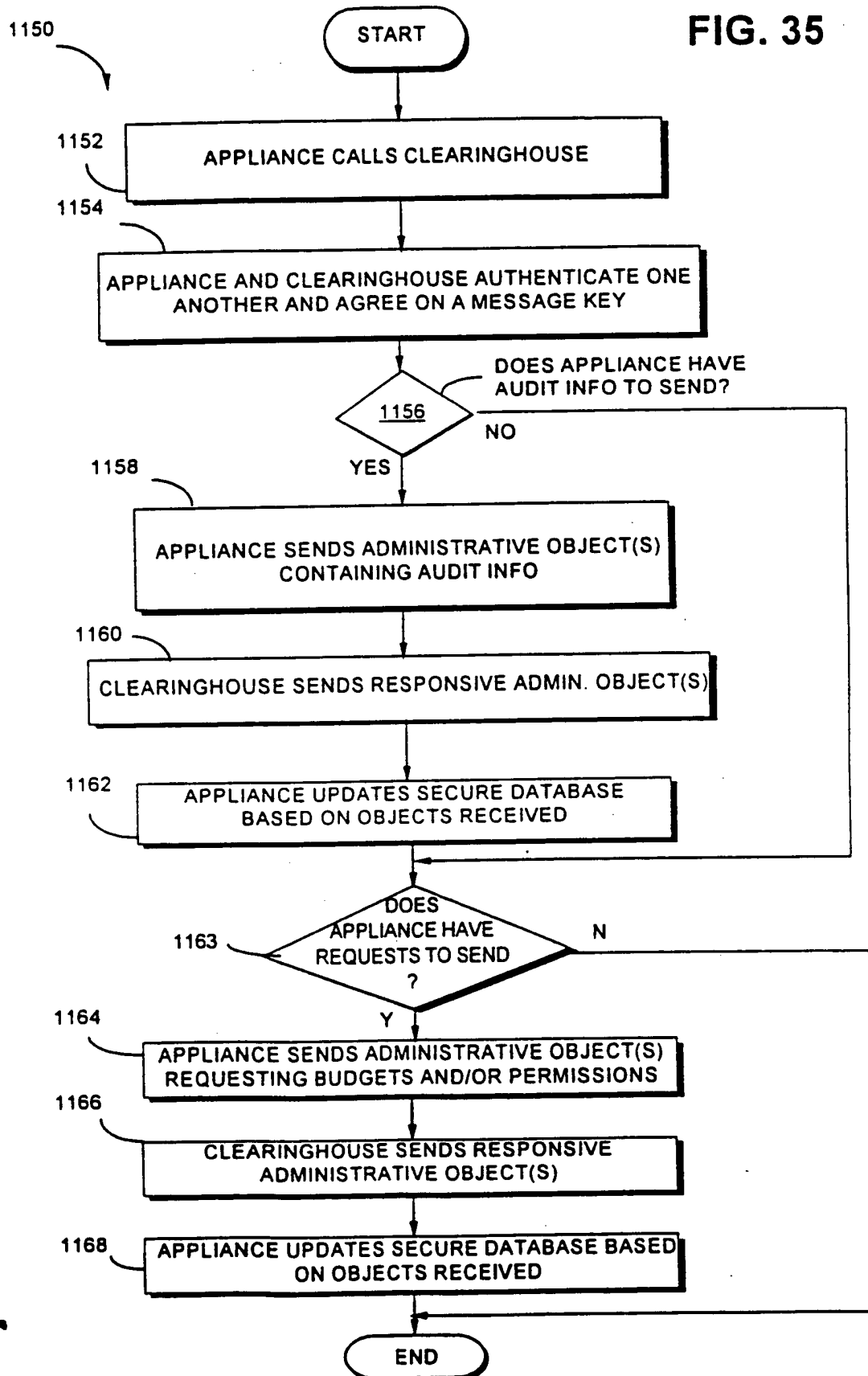


FIG. 36

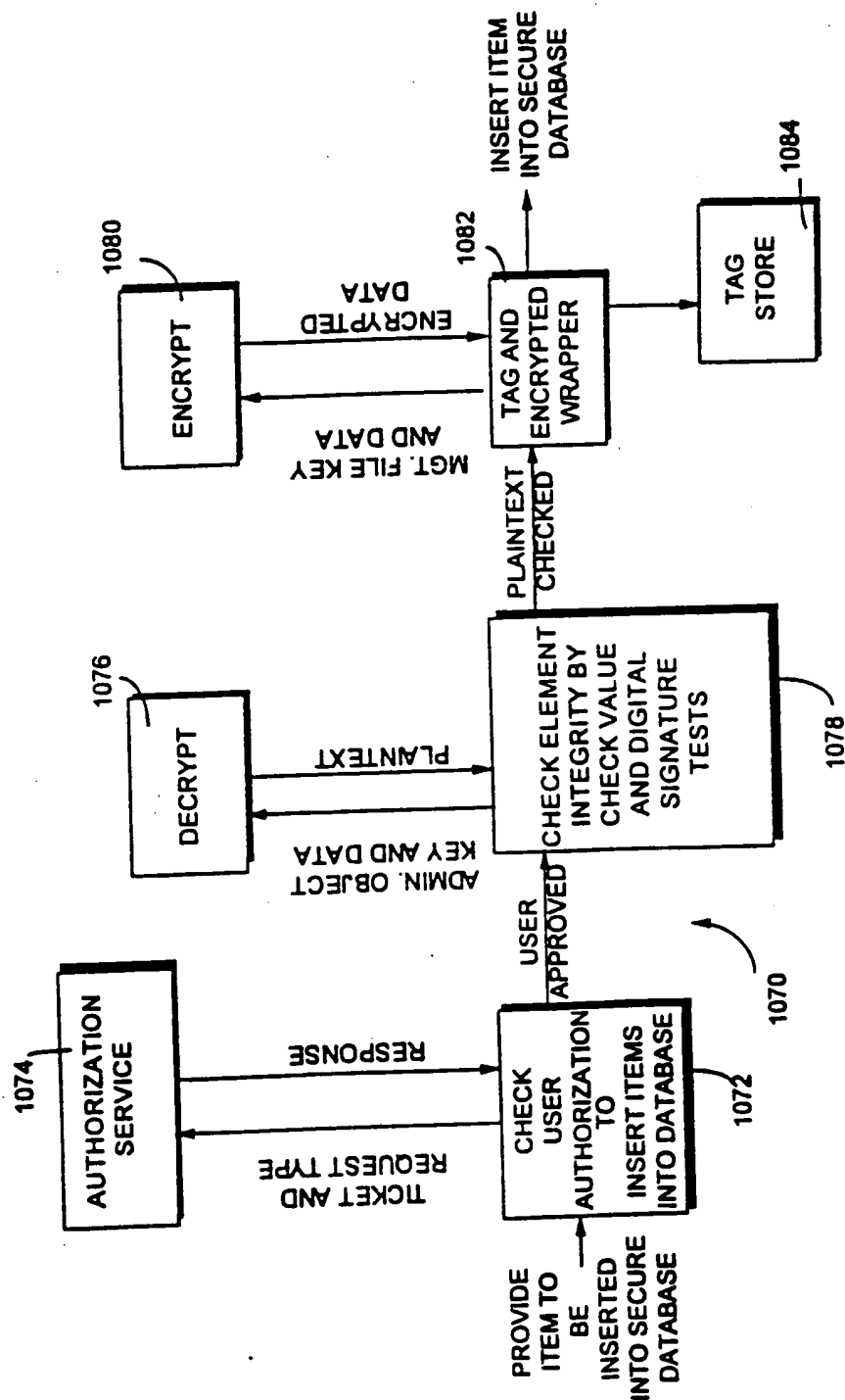


FIG. 37

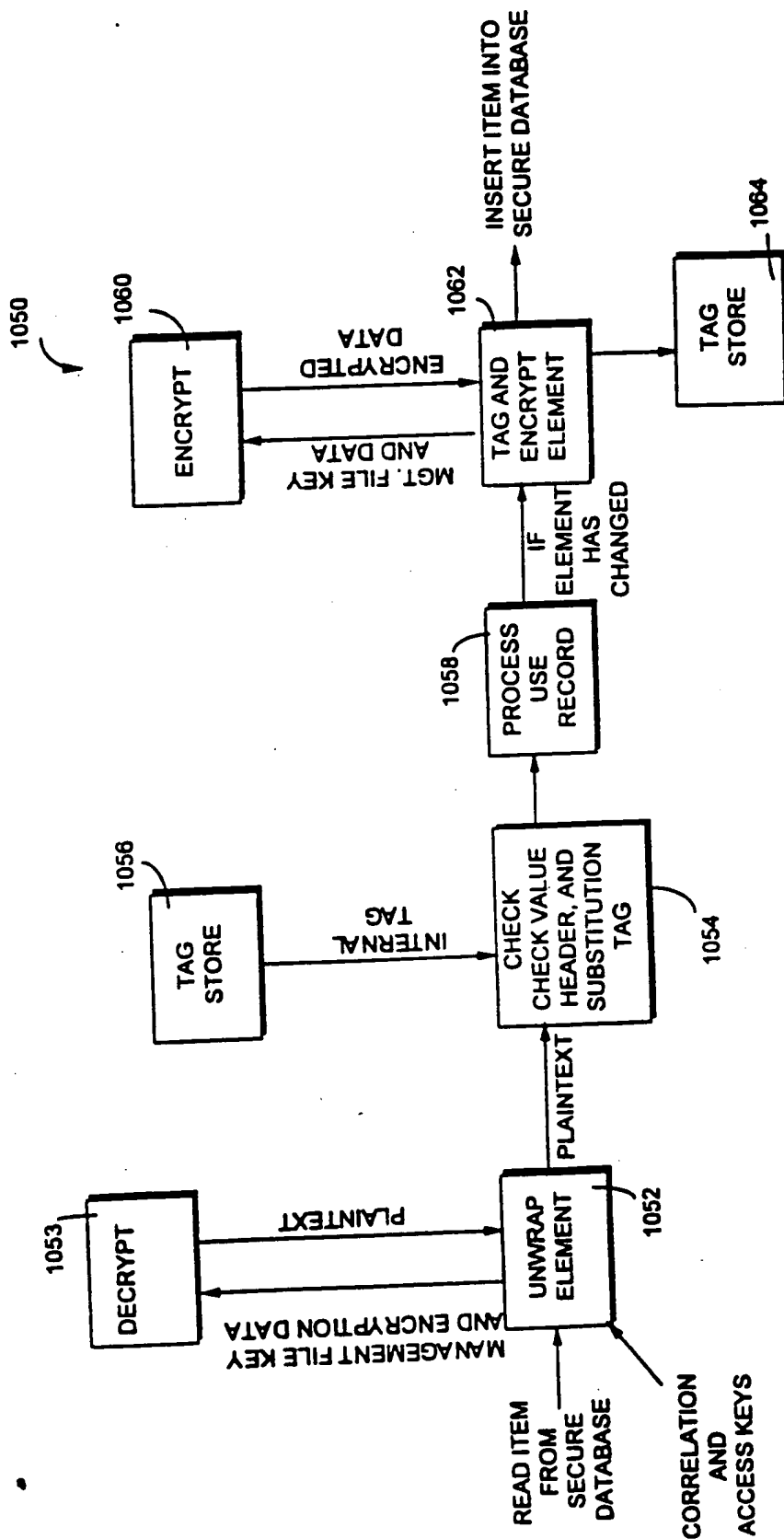
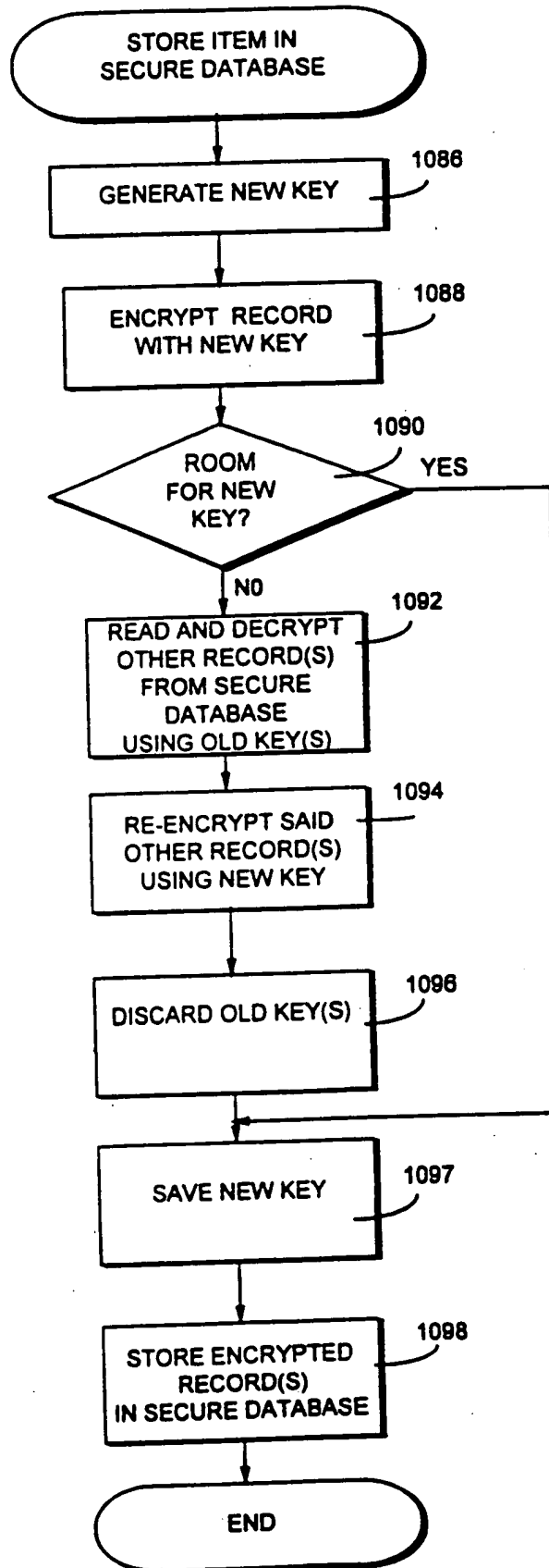
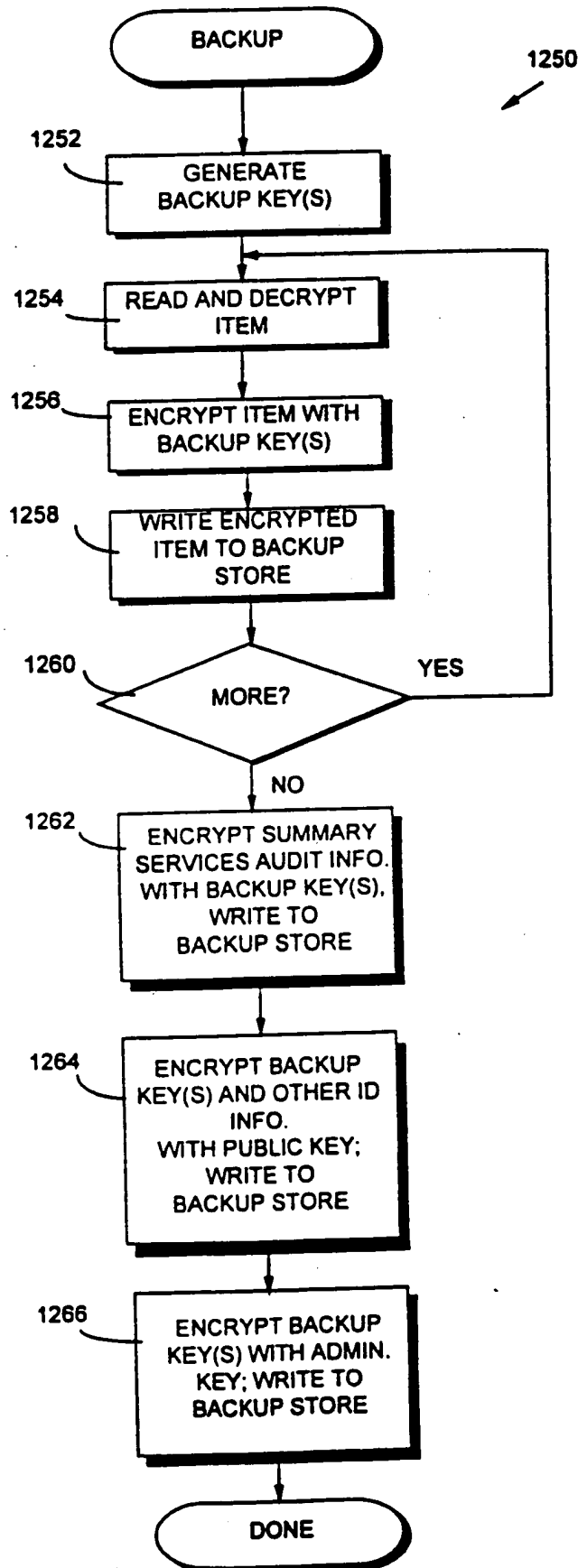


FIG. 38



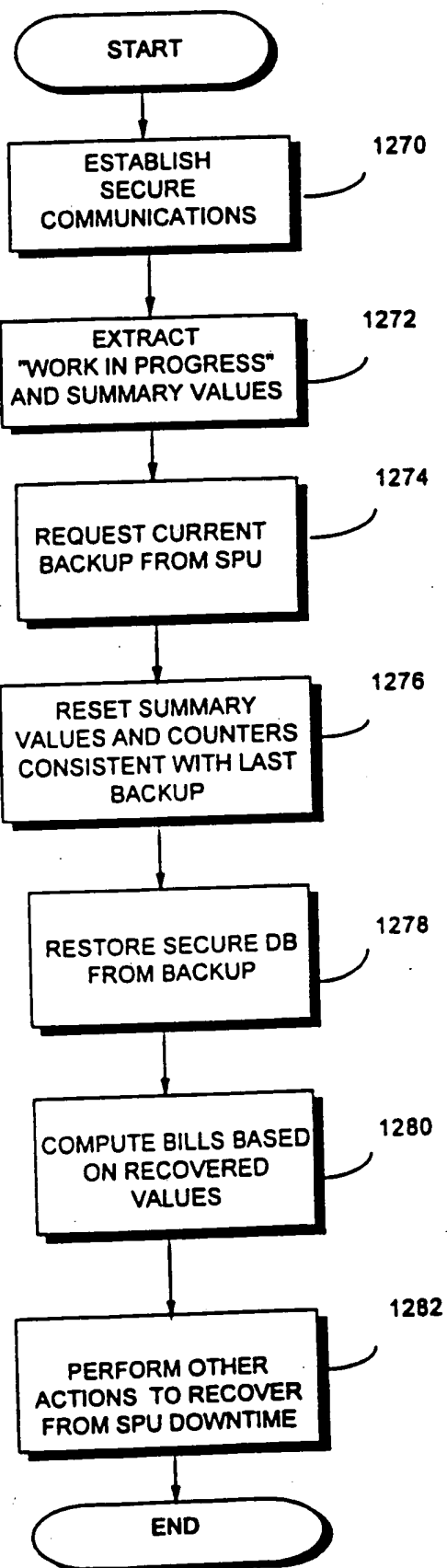


**FIG. 39**  
BACKUP



**FIG. 40**  
RECOVER SECURE DATABASE

1268



TOP SECRET

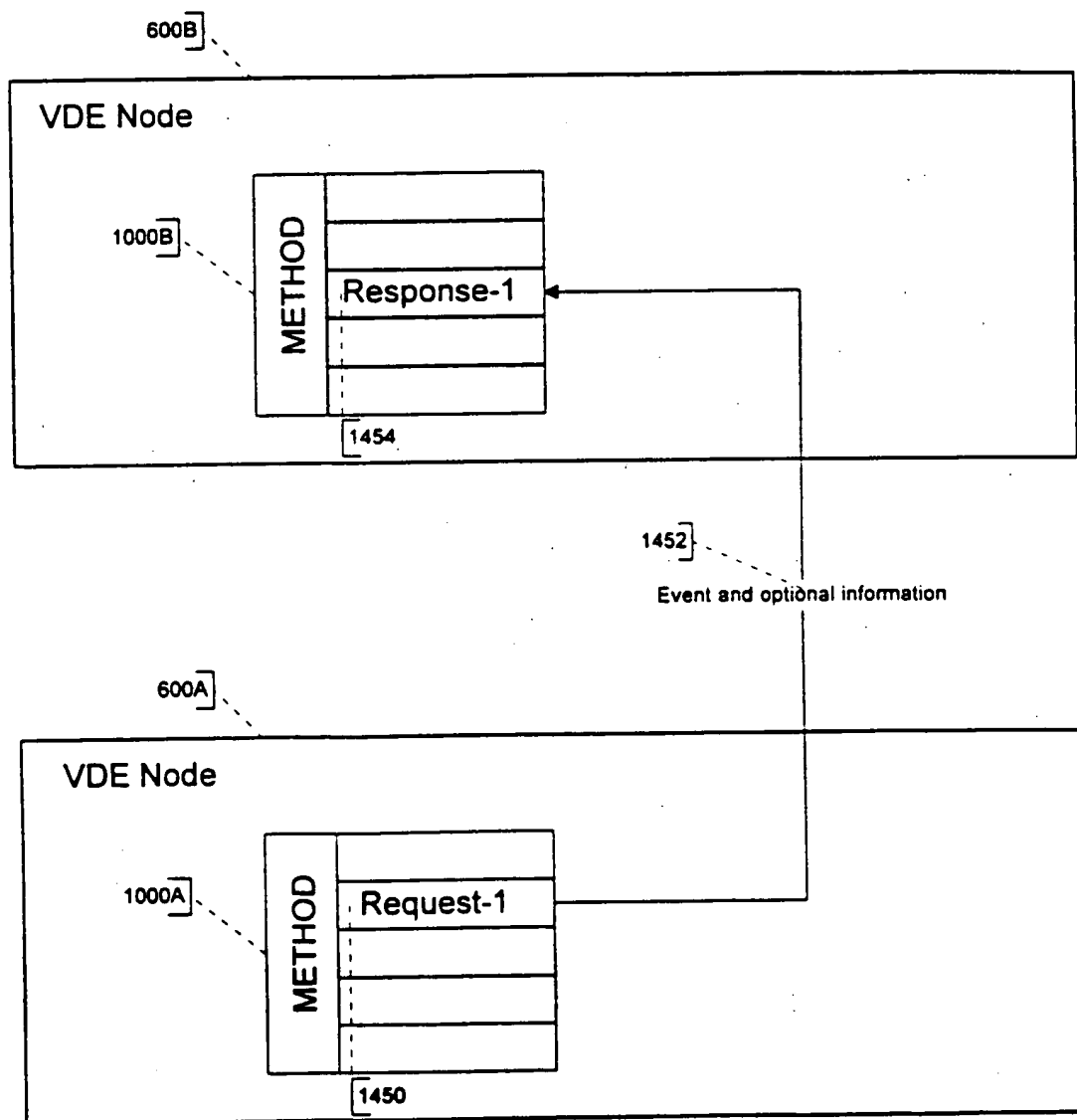


Figure 41a

0000044960

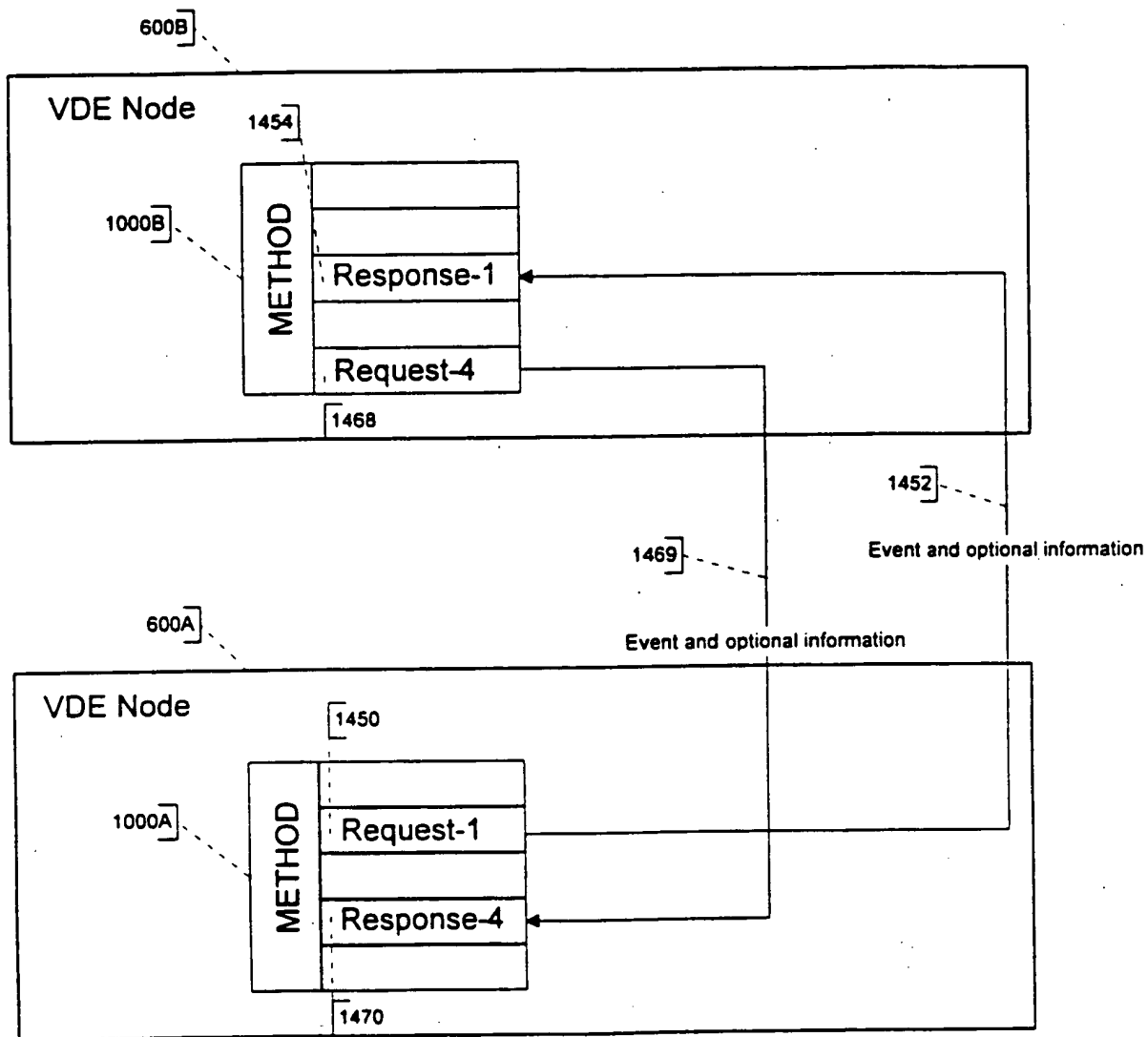


Figure 41b

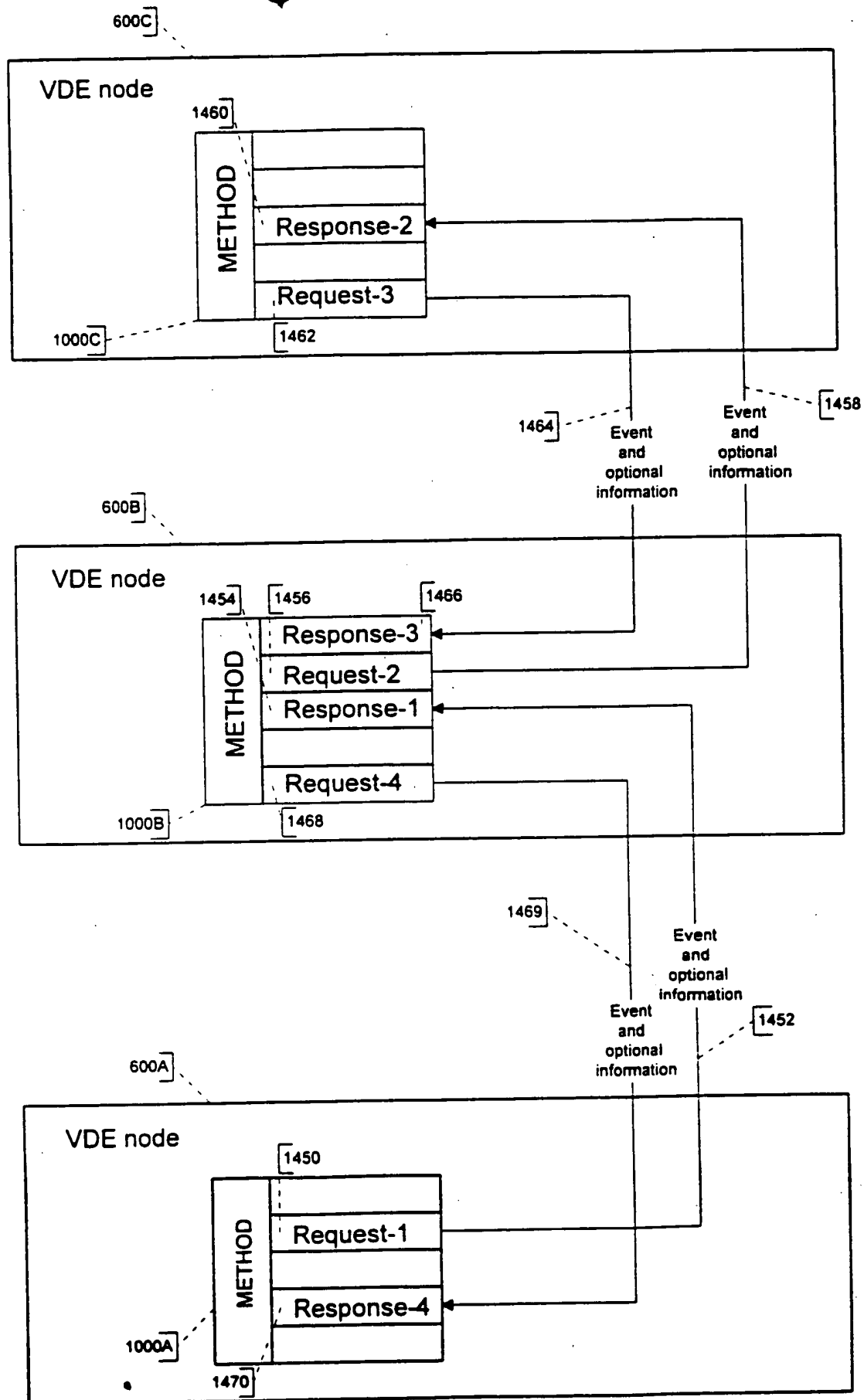


Figure 41c

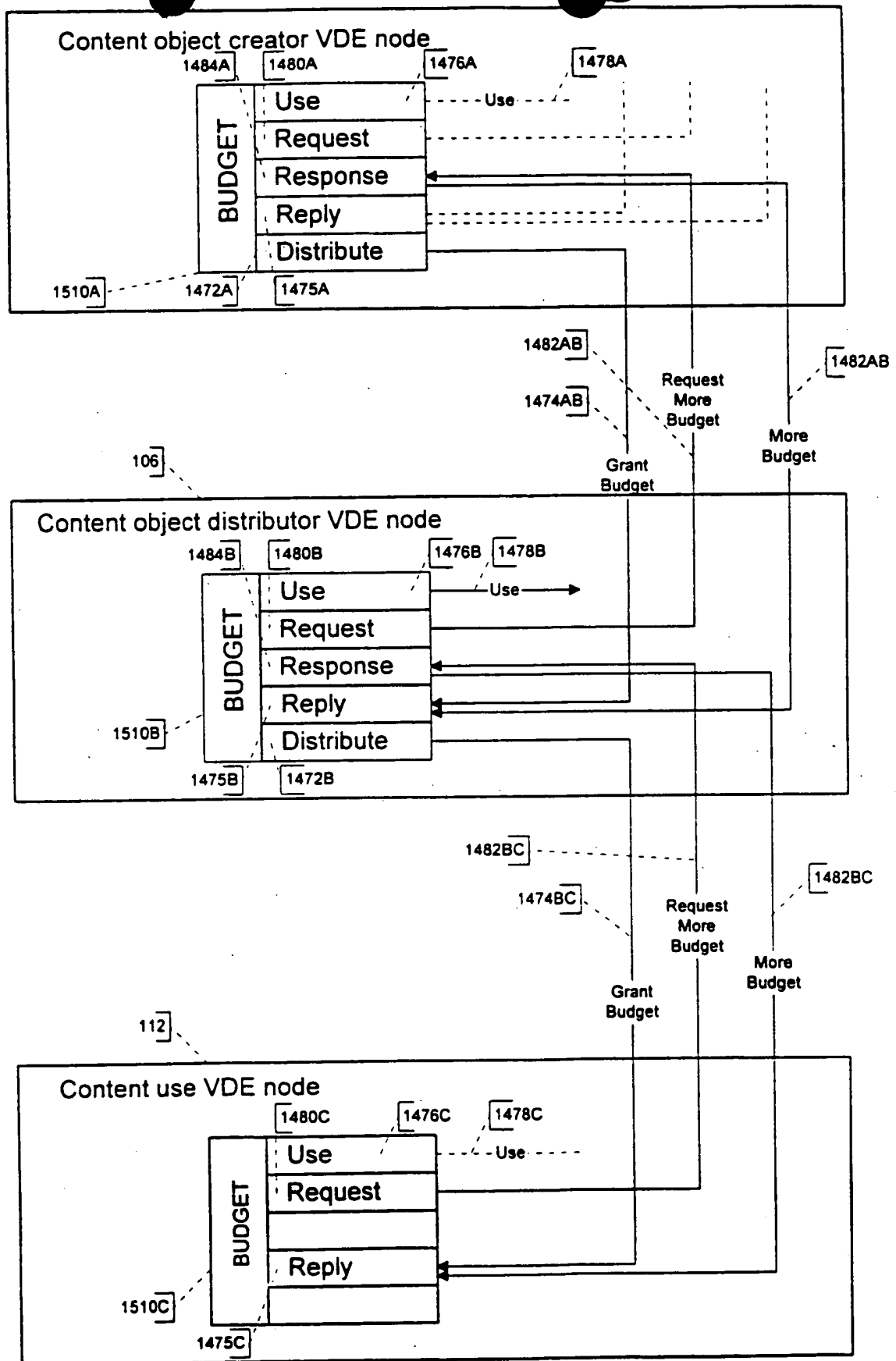


Figure 41d

# BUDGET Method Use Process Flow

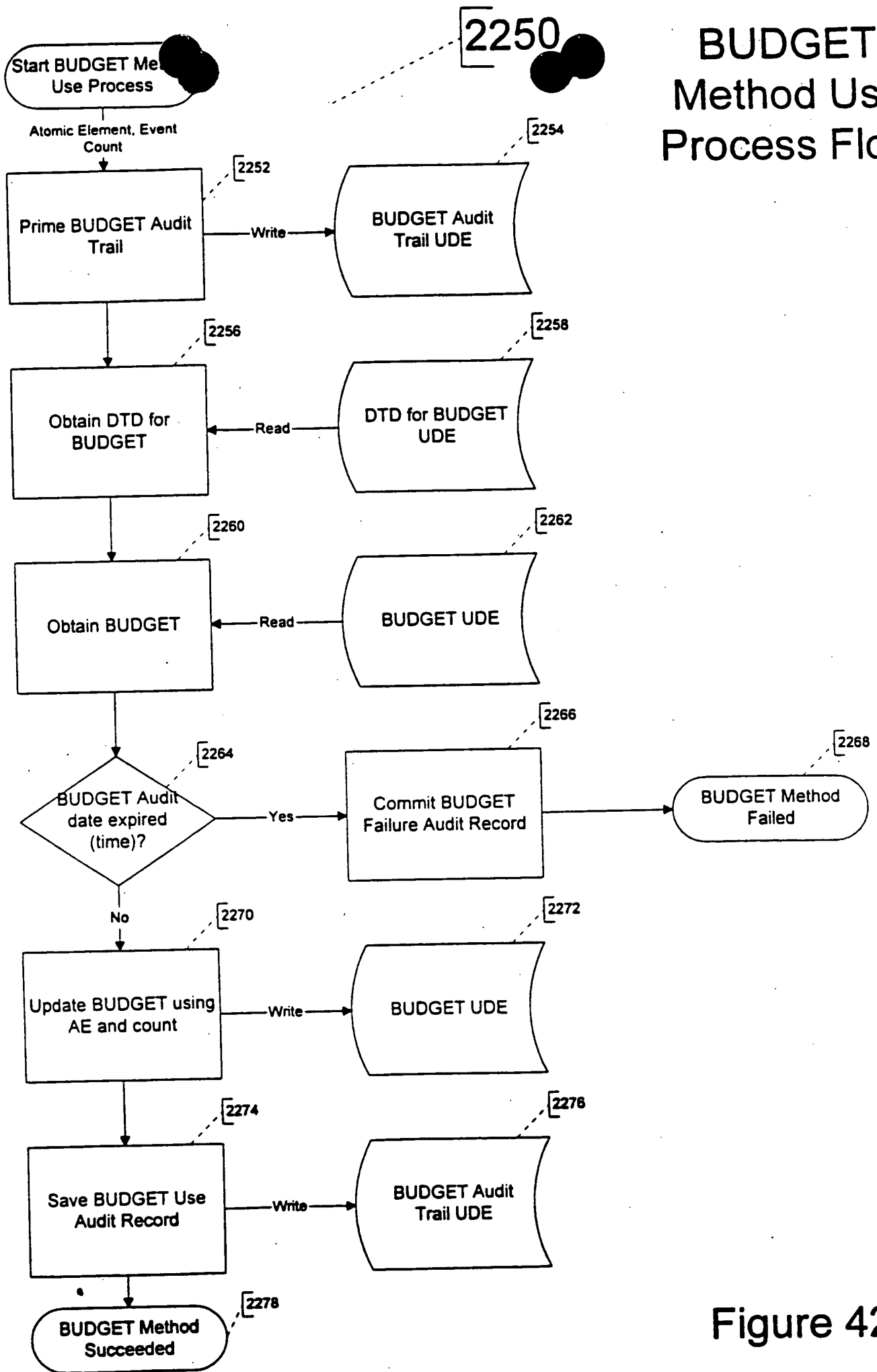
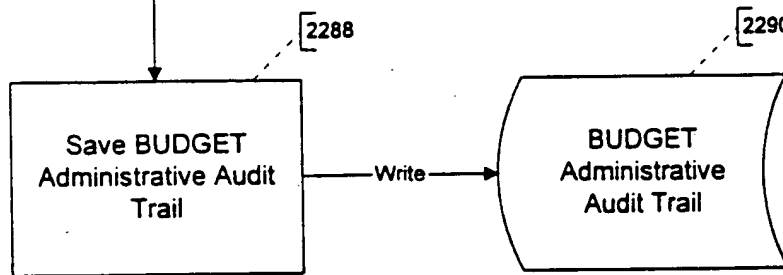
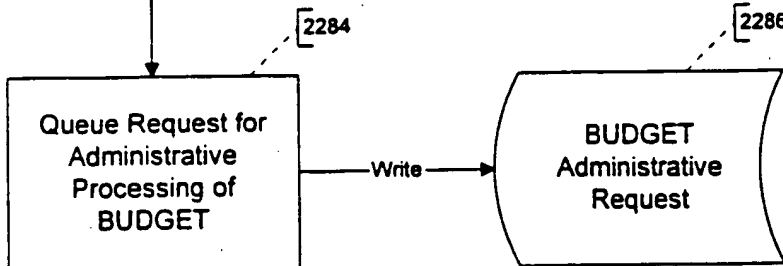
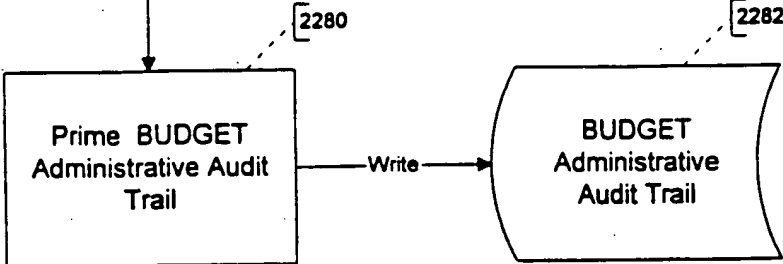


Figure 42a

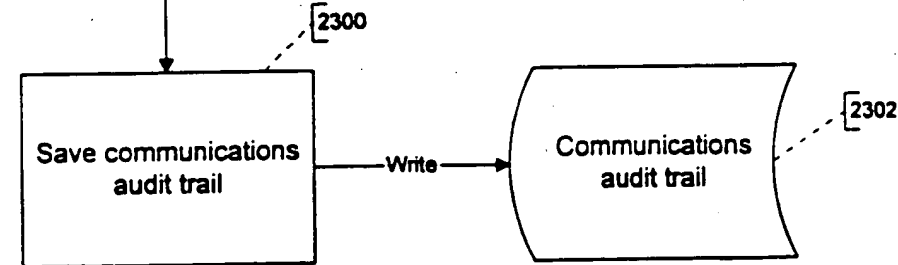
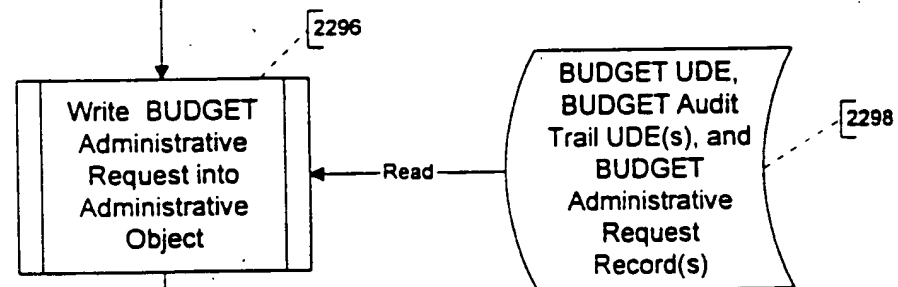
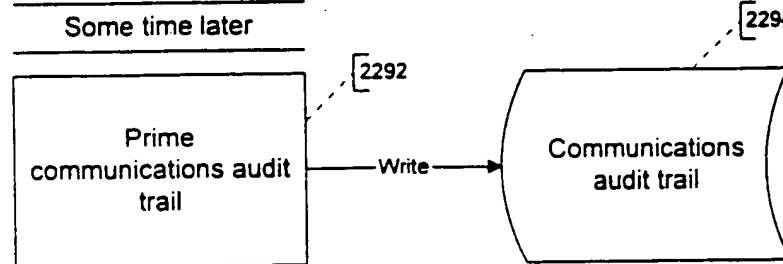
Start BUDGET Method  
Administrative Request  
Process

2250

# BUDGET Method Administrative Request Process Flow



Some time later



2304

End BUDGET Method  
Administration Request  
Process

Figure 42b



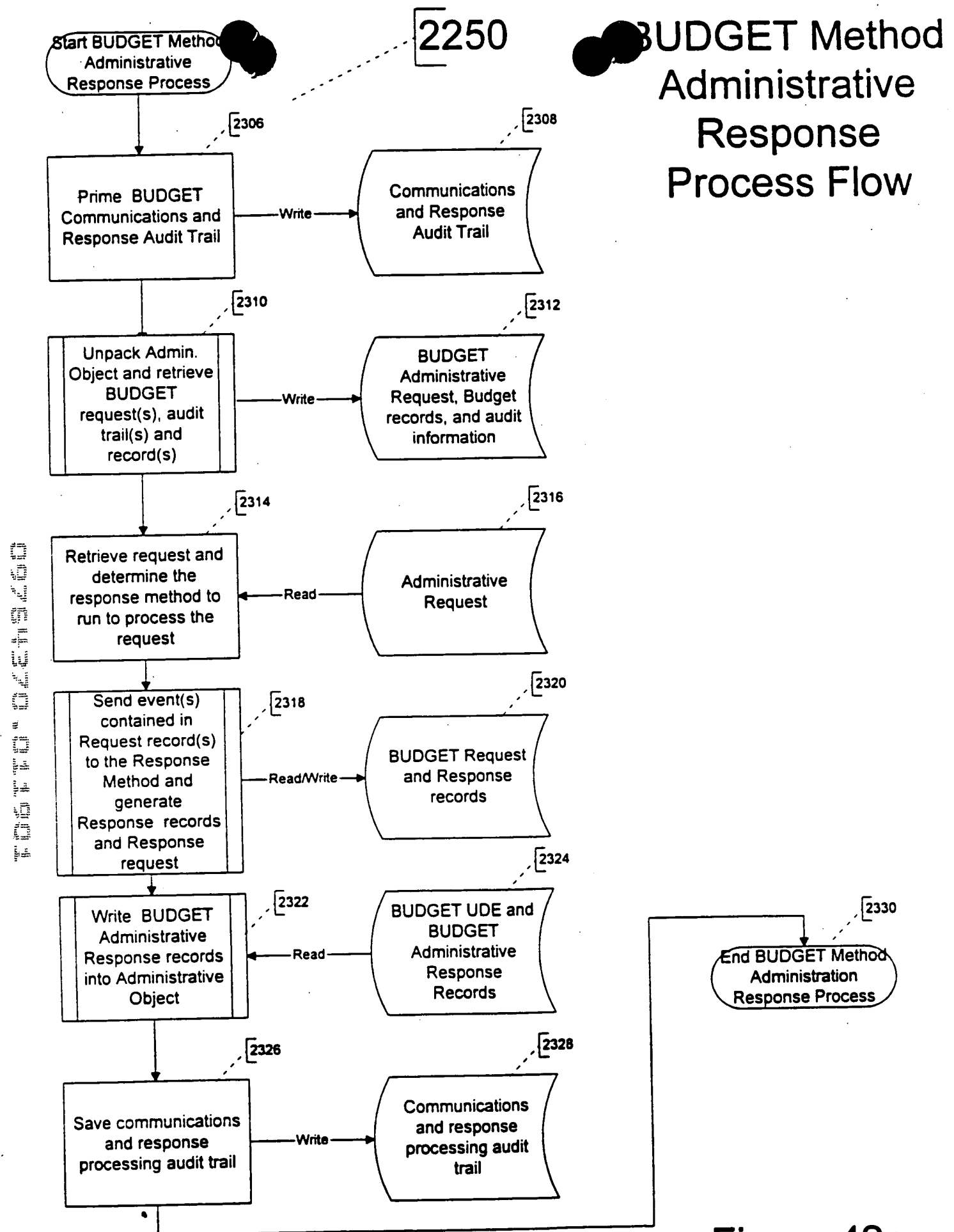


Figure 42c

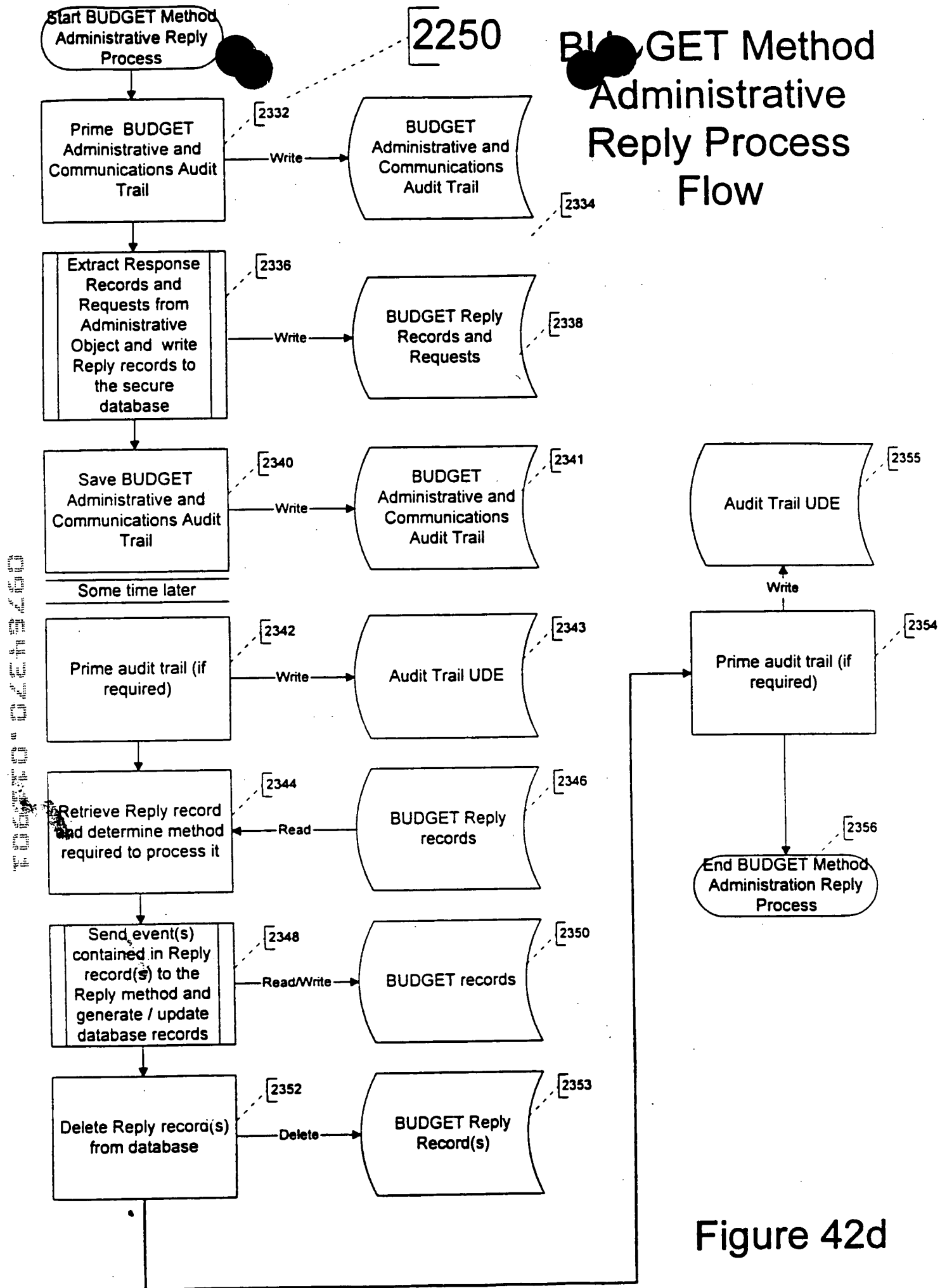


Figure 42d

# REGISTER Method Use Process Flow

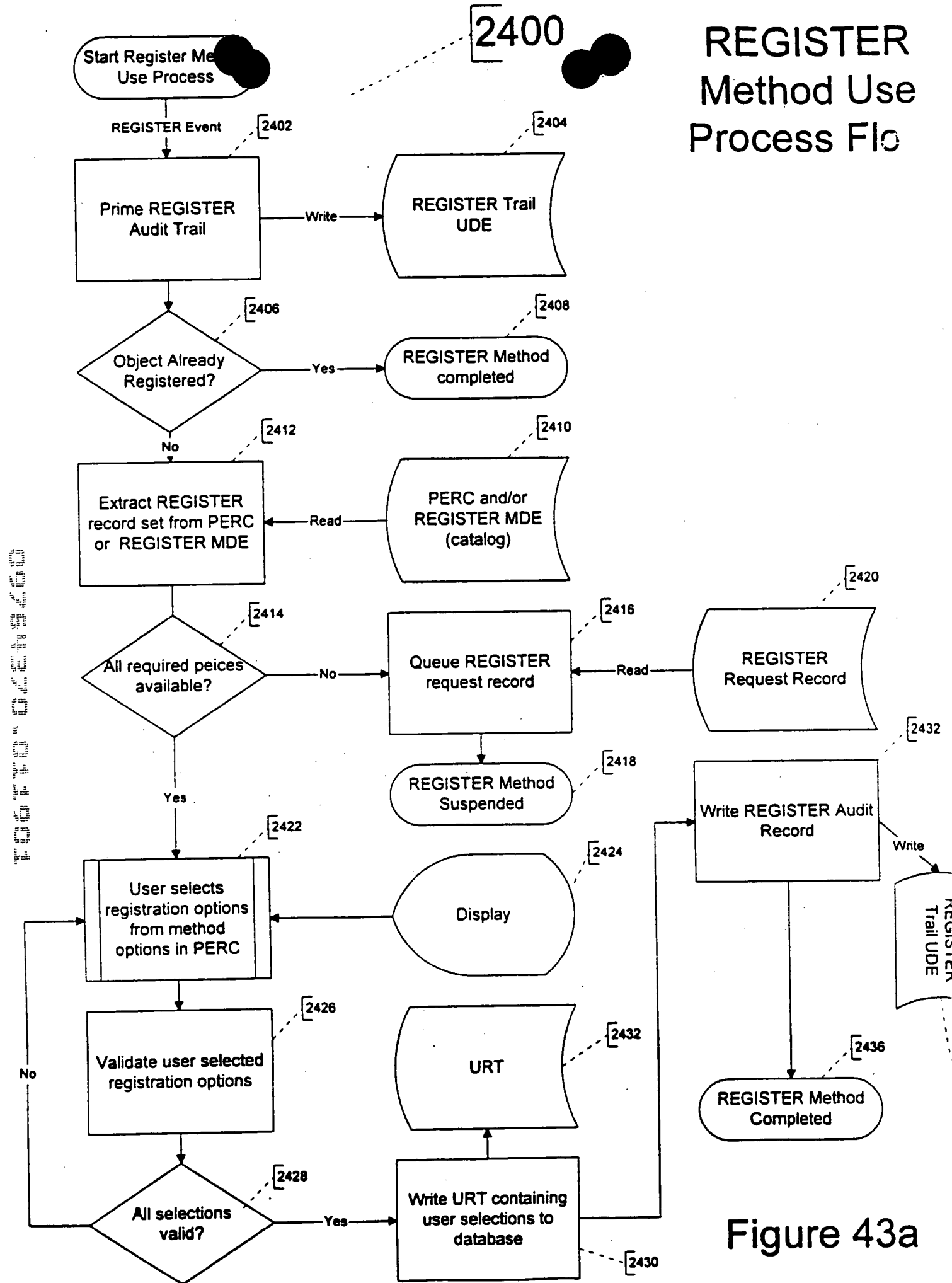


Figure 43a

# REGISTER Method Administrative Request Process Flow

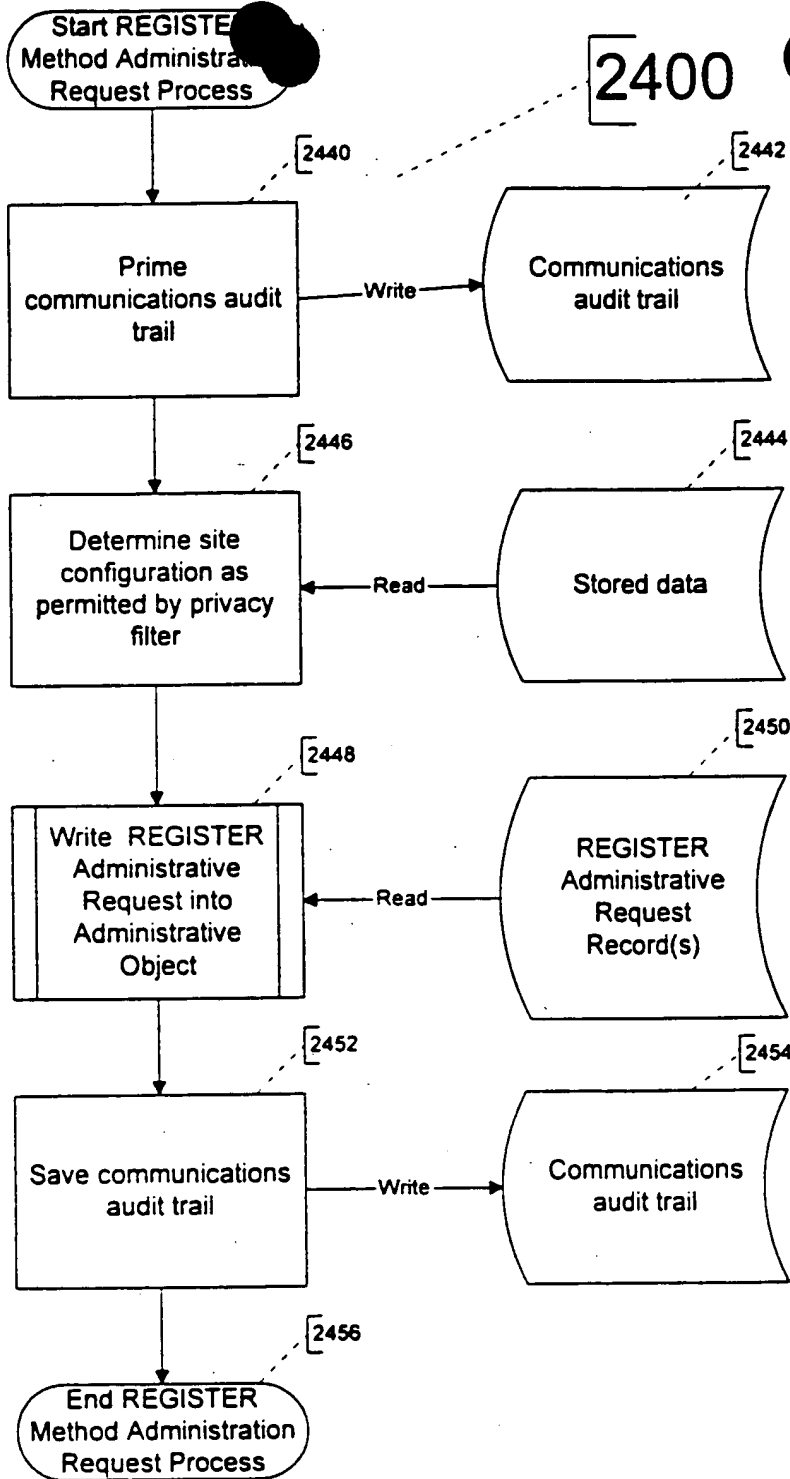


Figure 43b

# REGISTER Method Administrative Response Process Flow

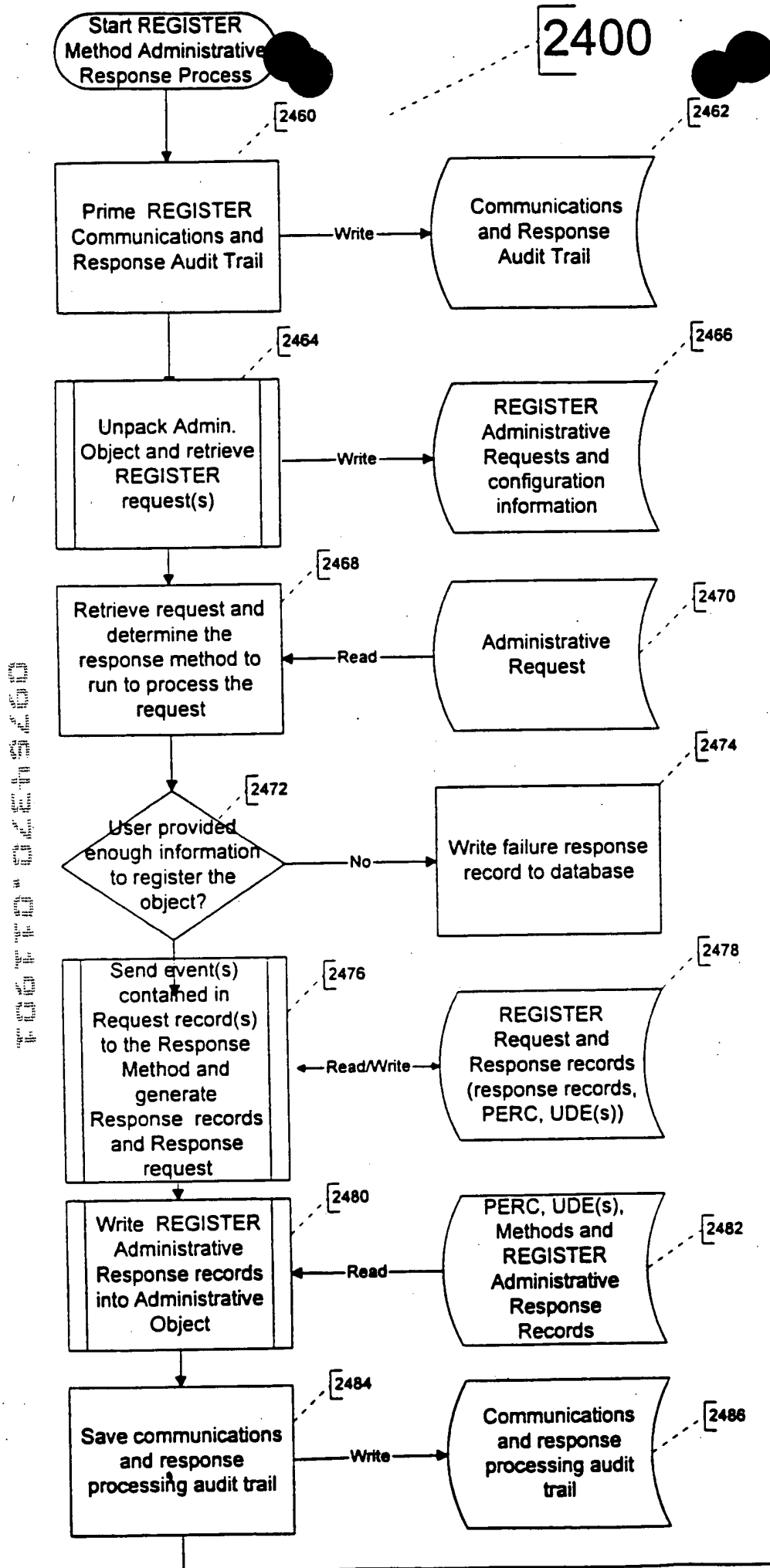


Figure 43c

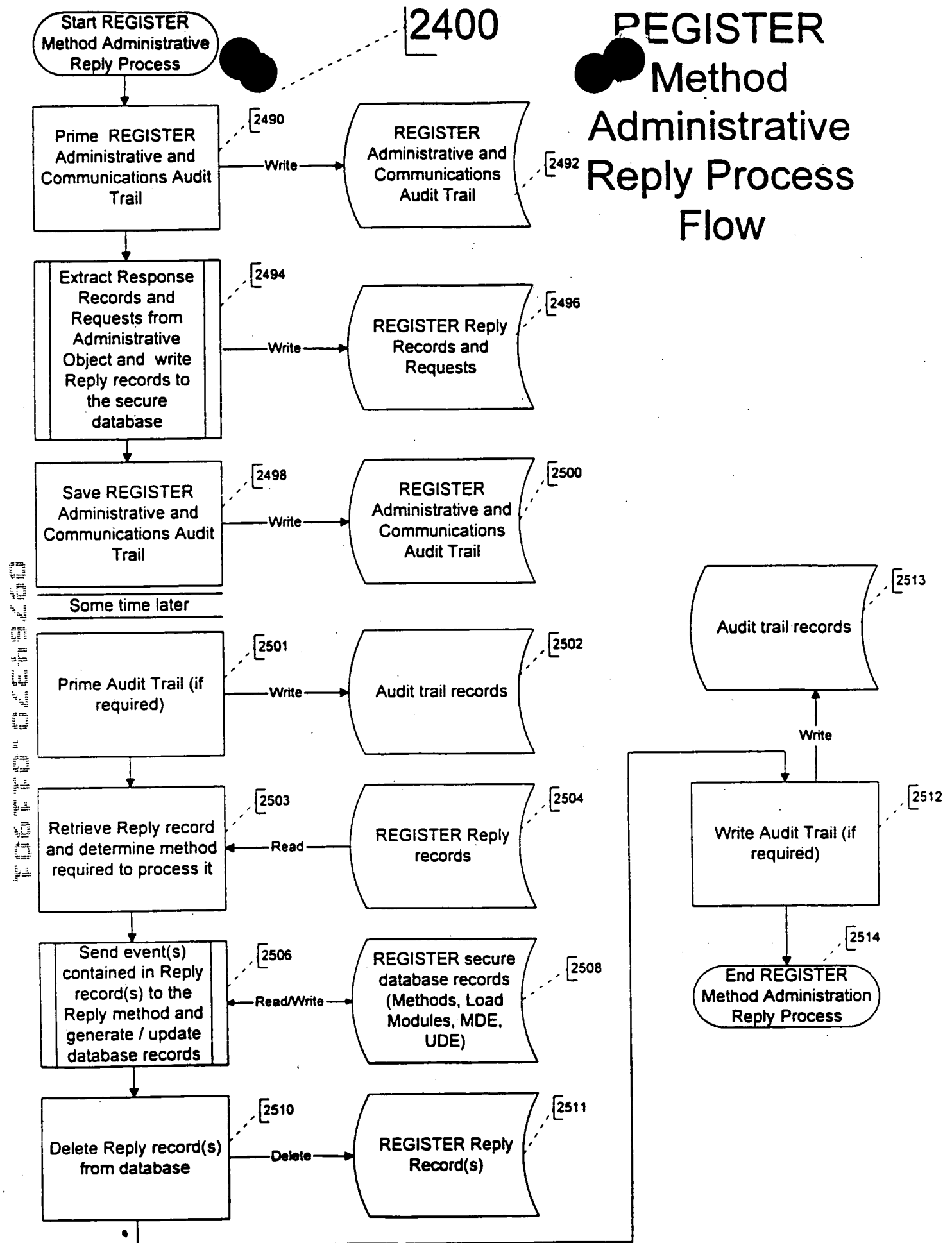


Figure 43d

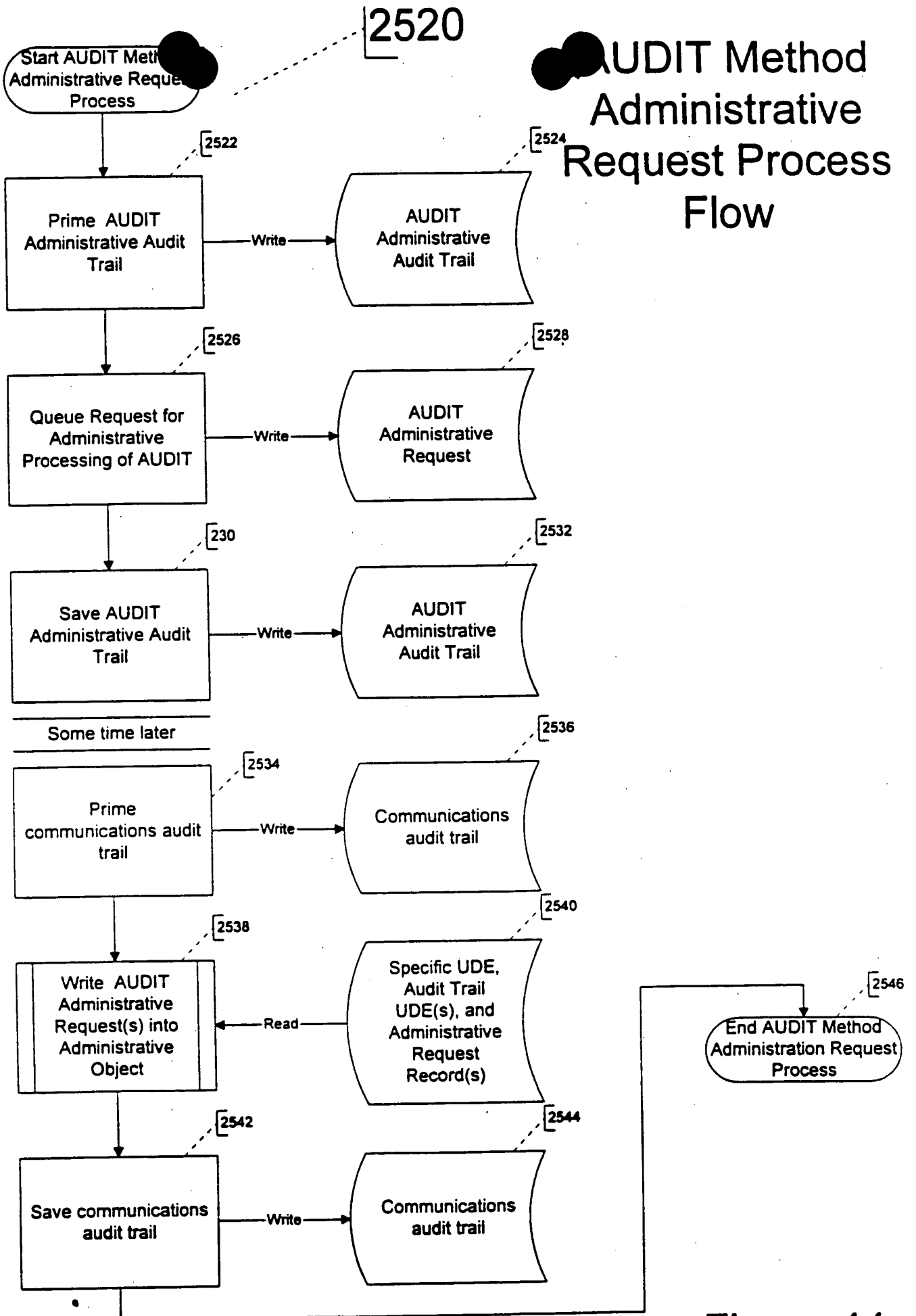


Figure 44a

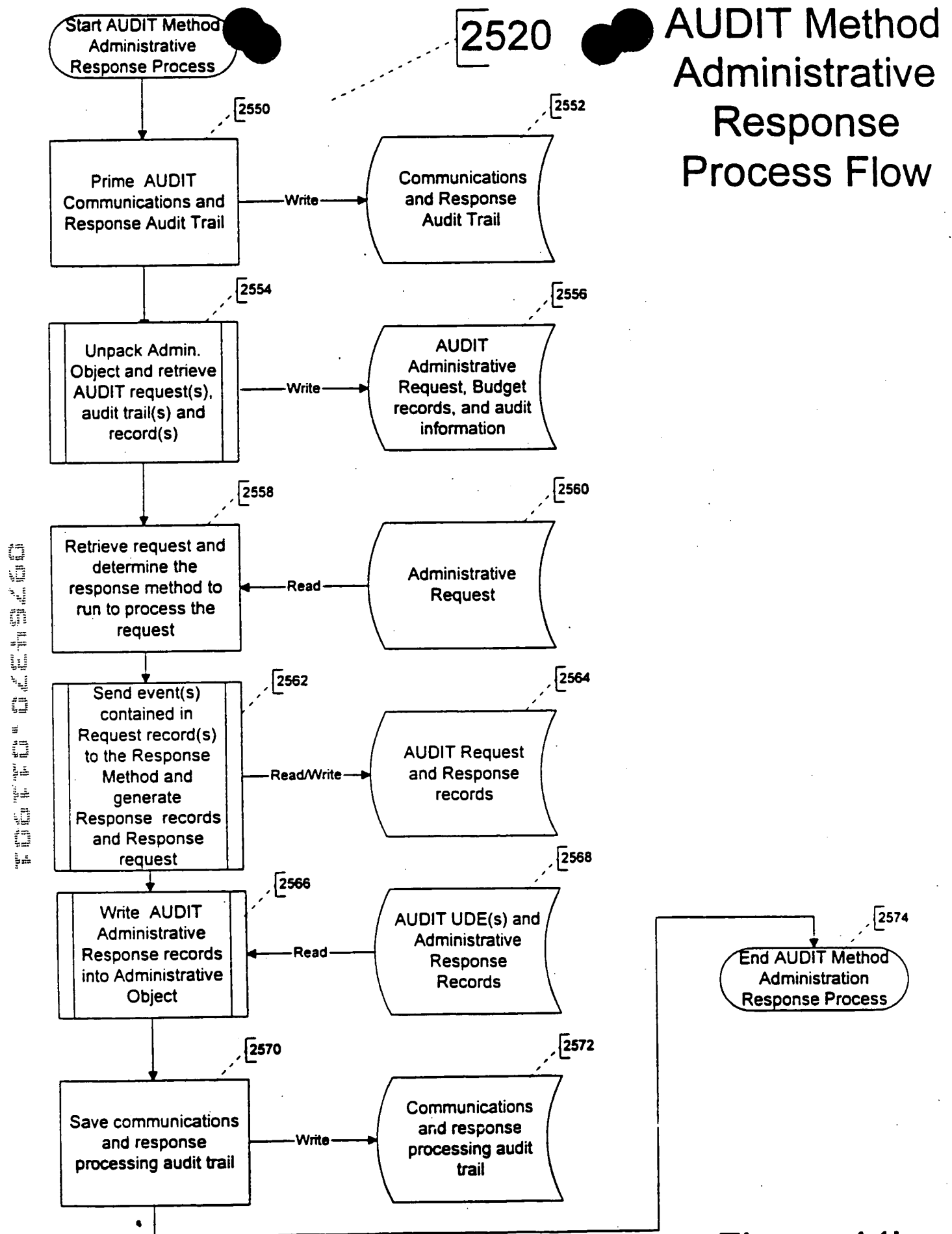


Figure 44b



# AUDIT Method Administrative Reply Process Flow

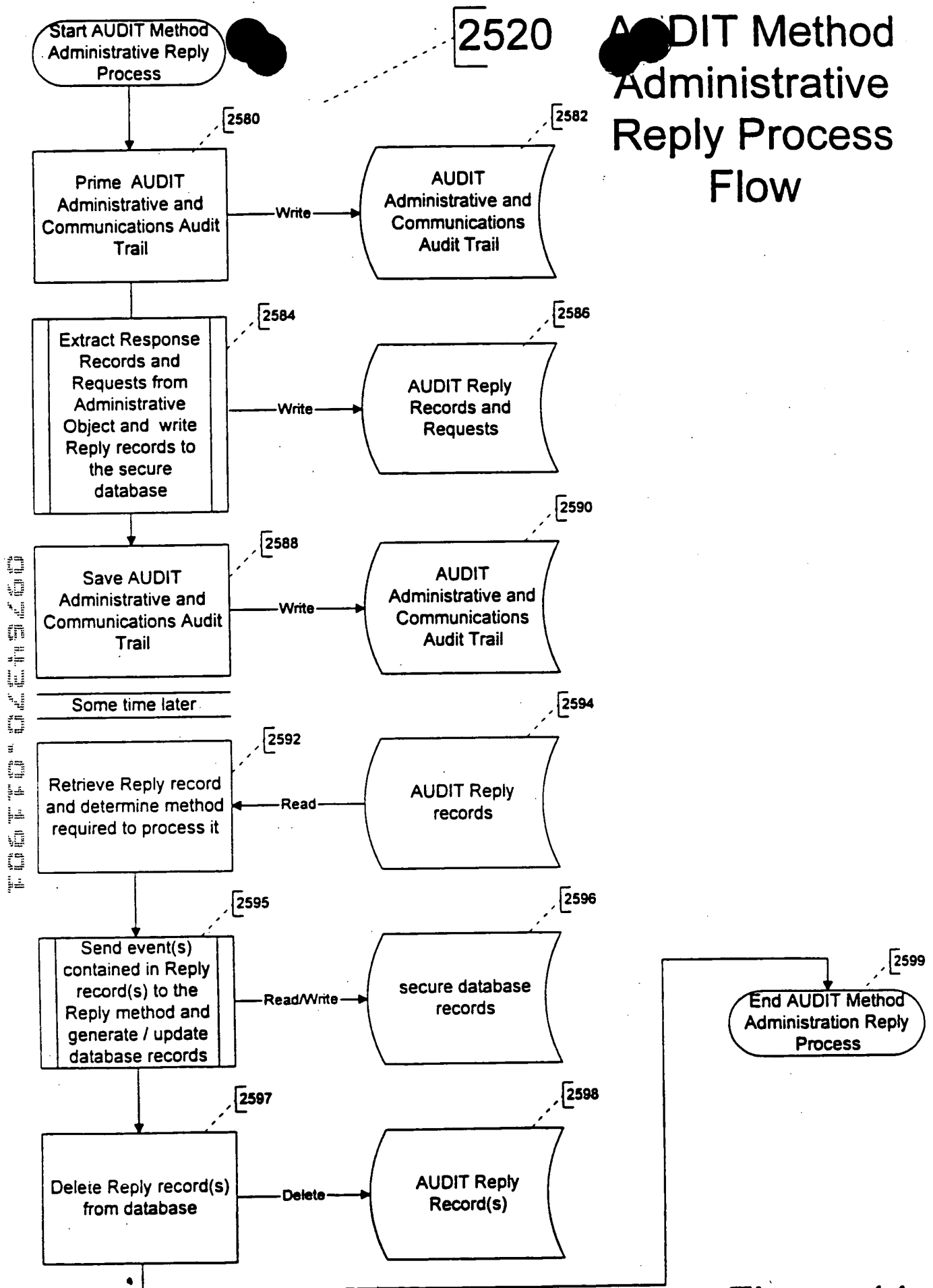


Figure 44c



FIG. 46

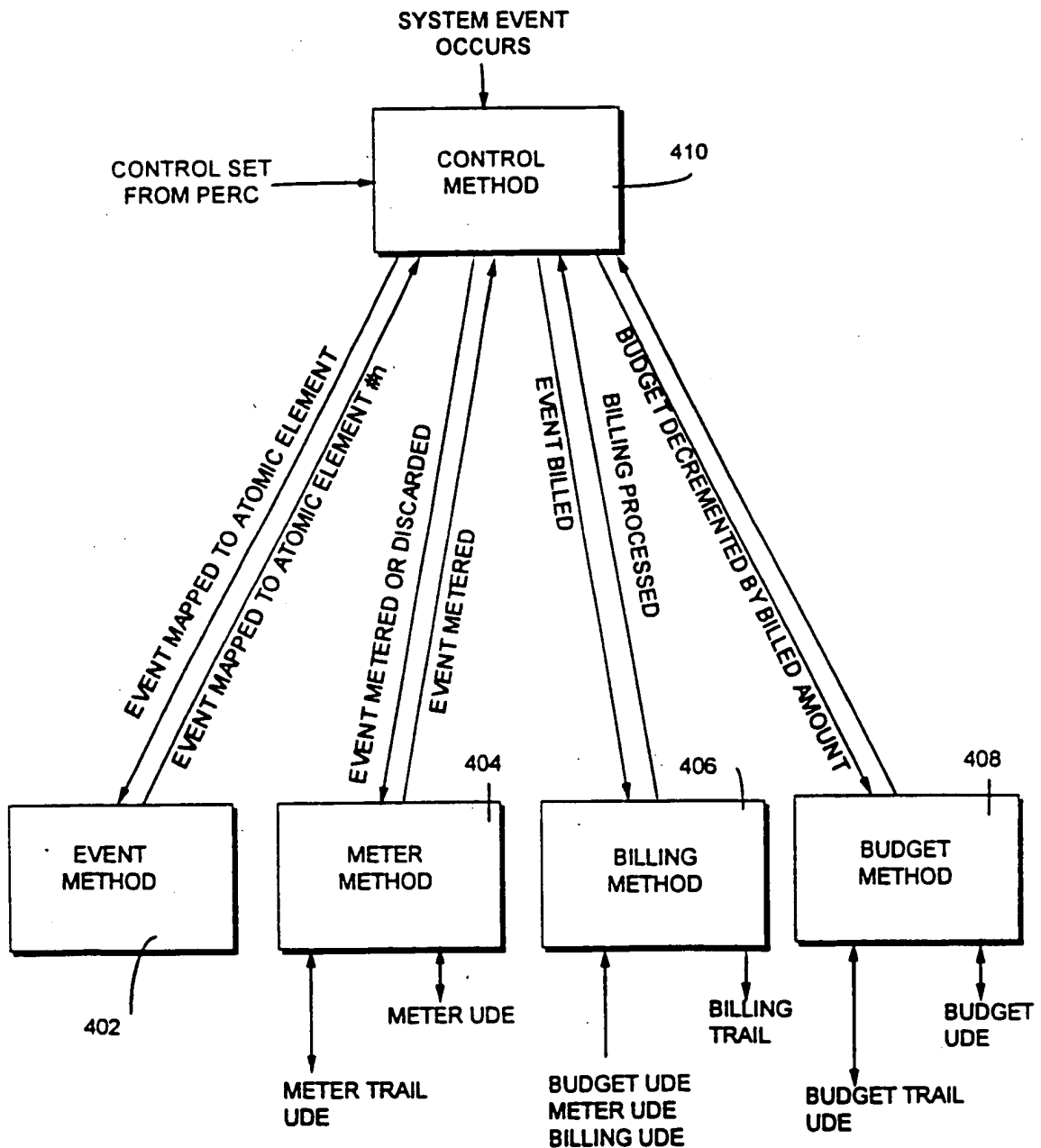
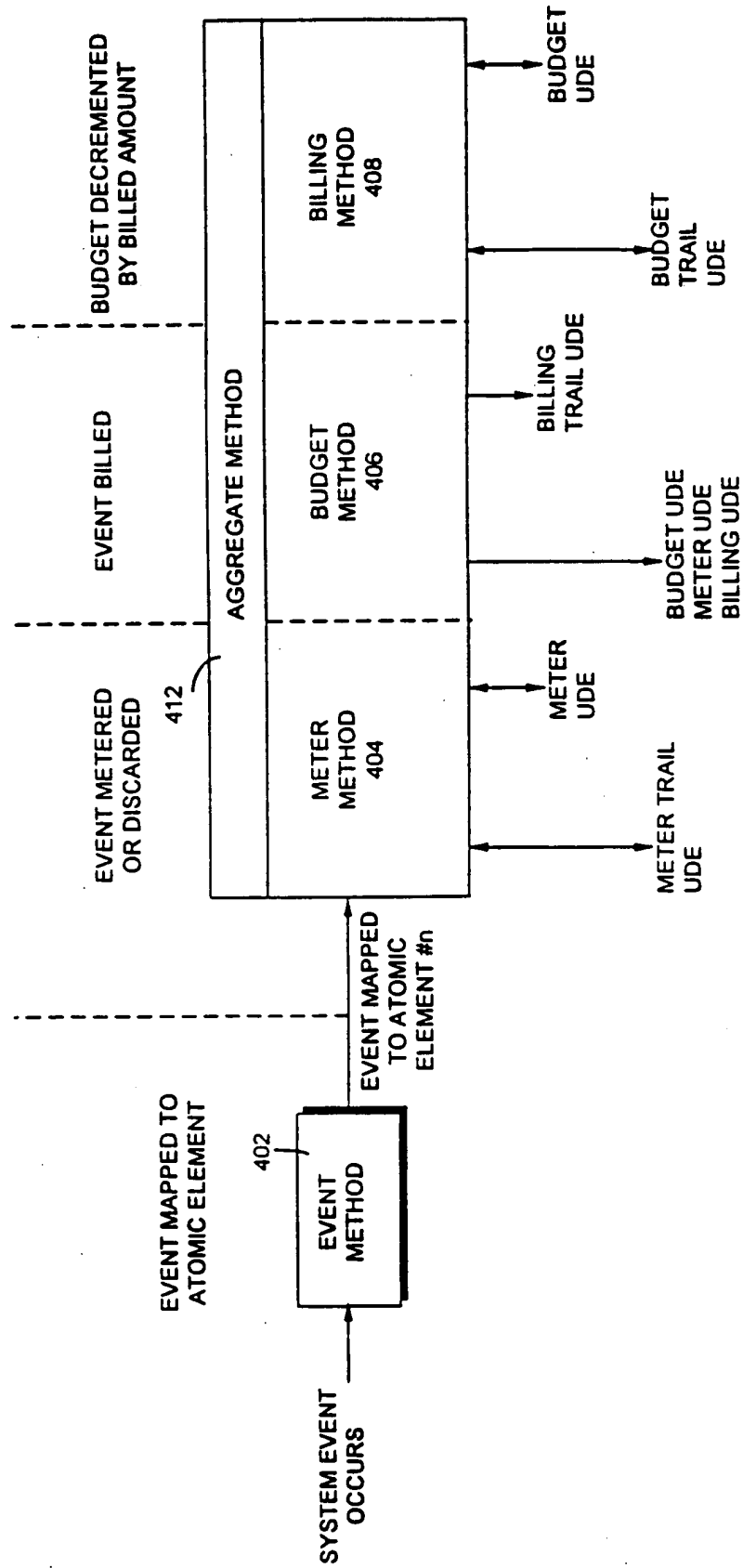


FIG. 47



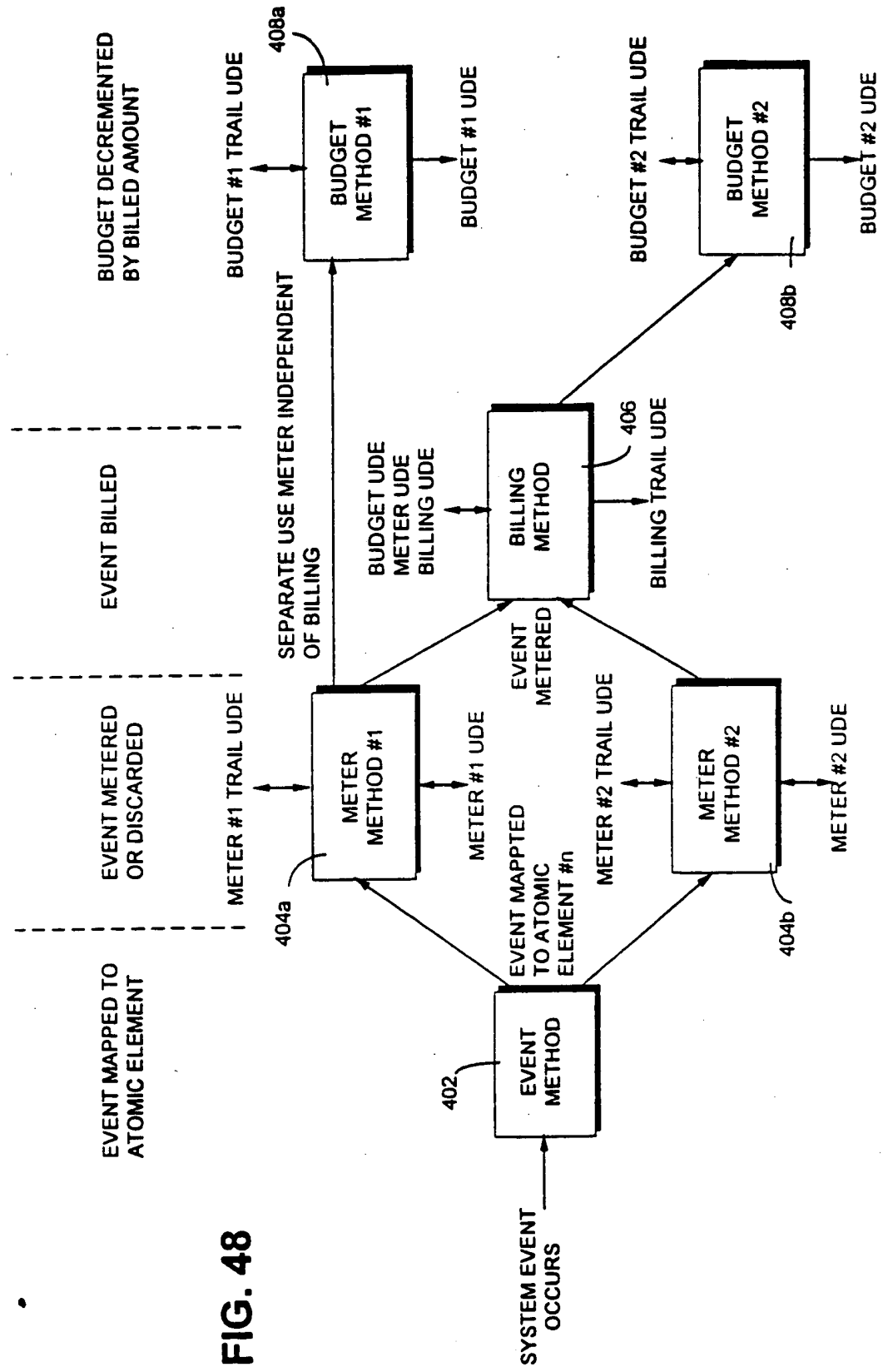


FIG. 48

# OPEN Method Use Process Flow

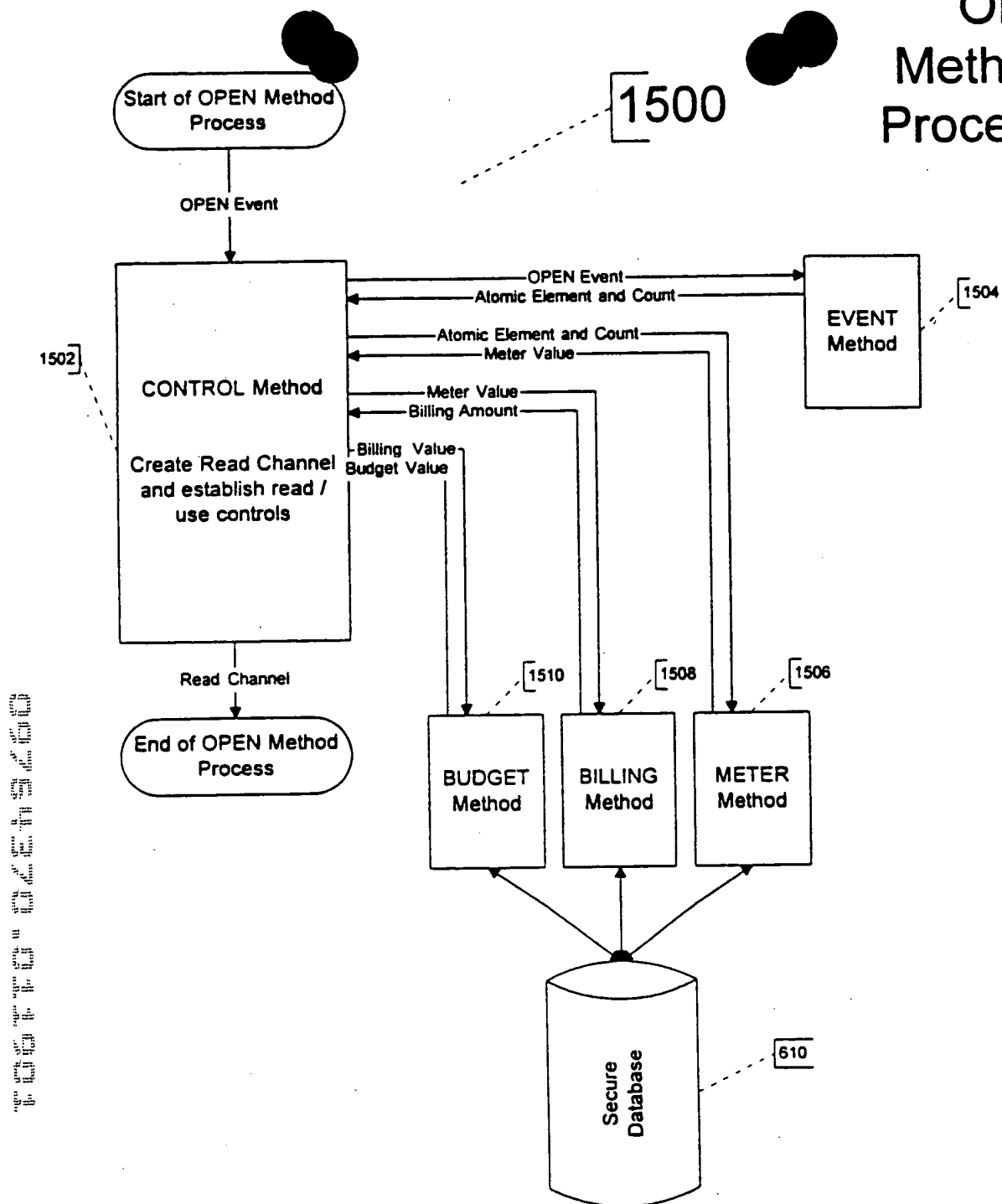


Figure 49

1500

Start of OPEN Method  
Process

1502

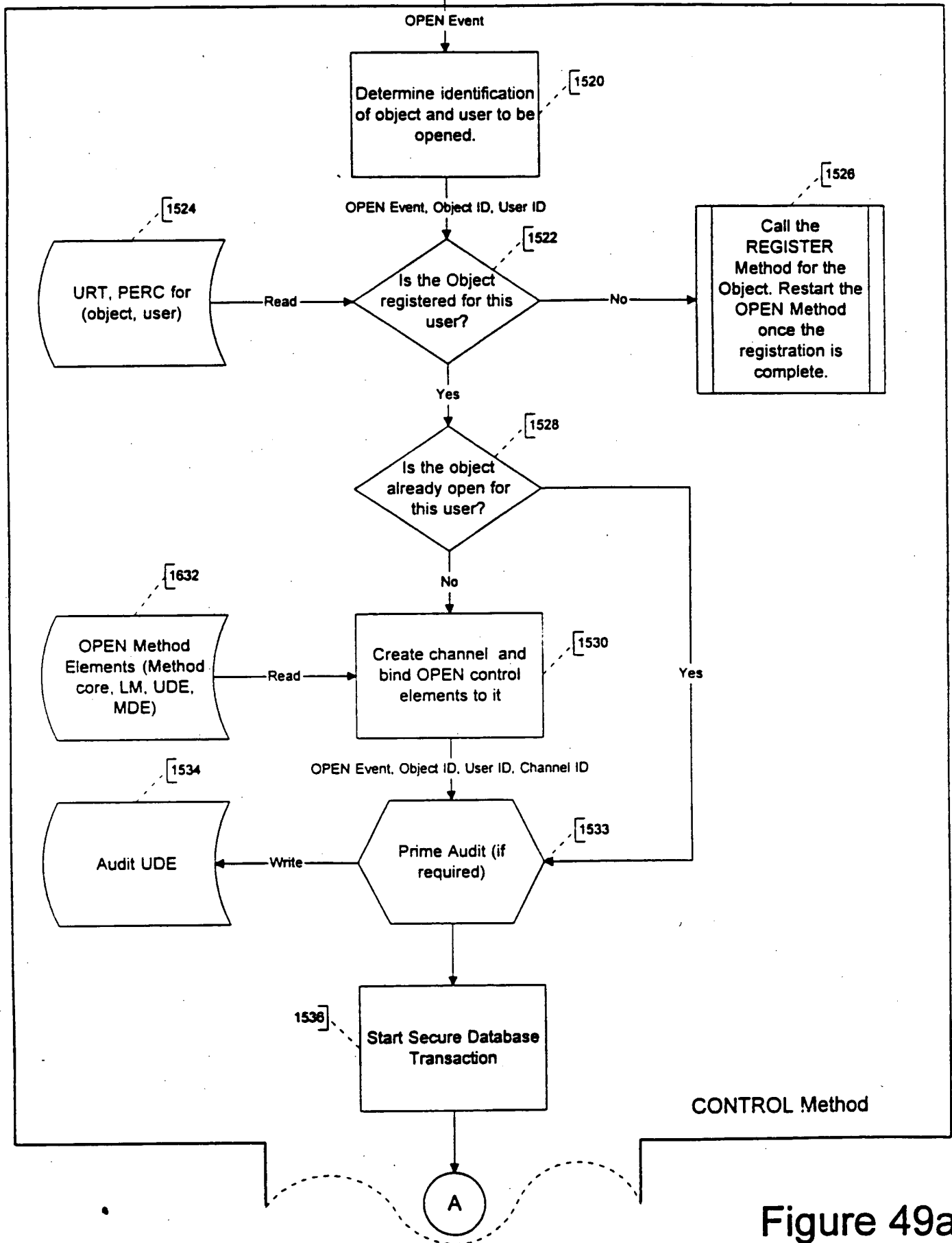


Figure 49a

Approved for Release

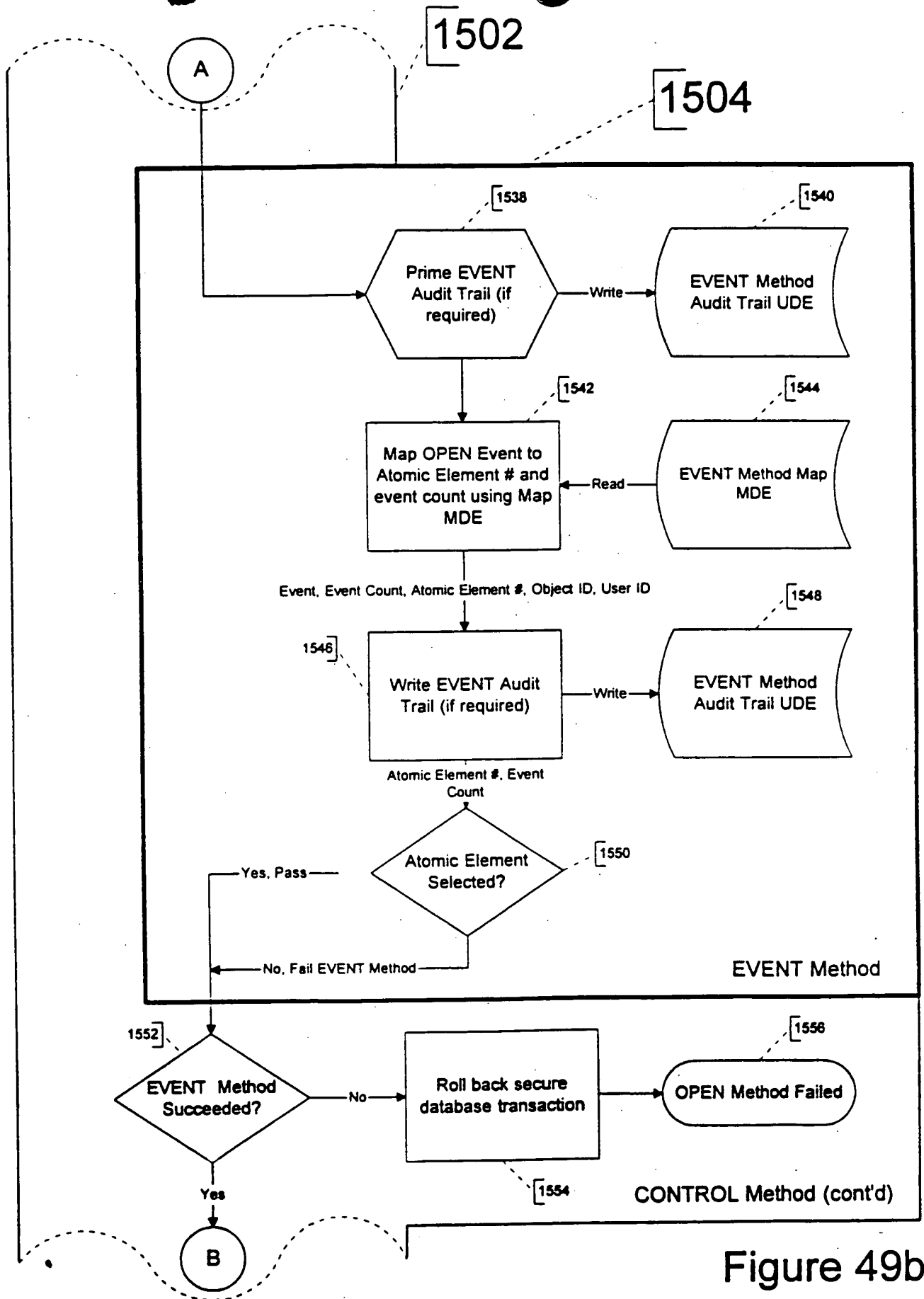
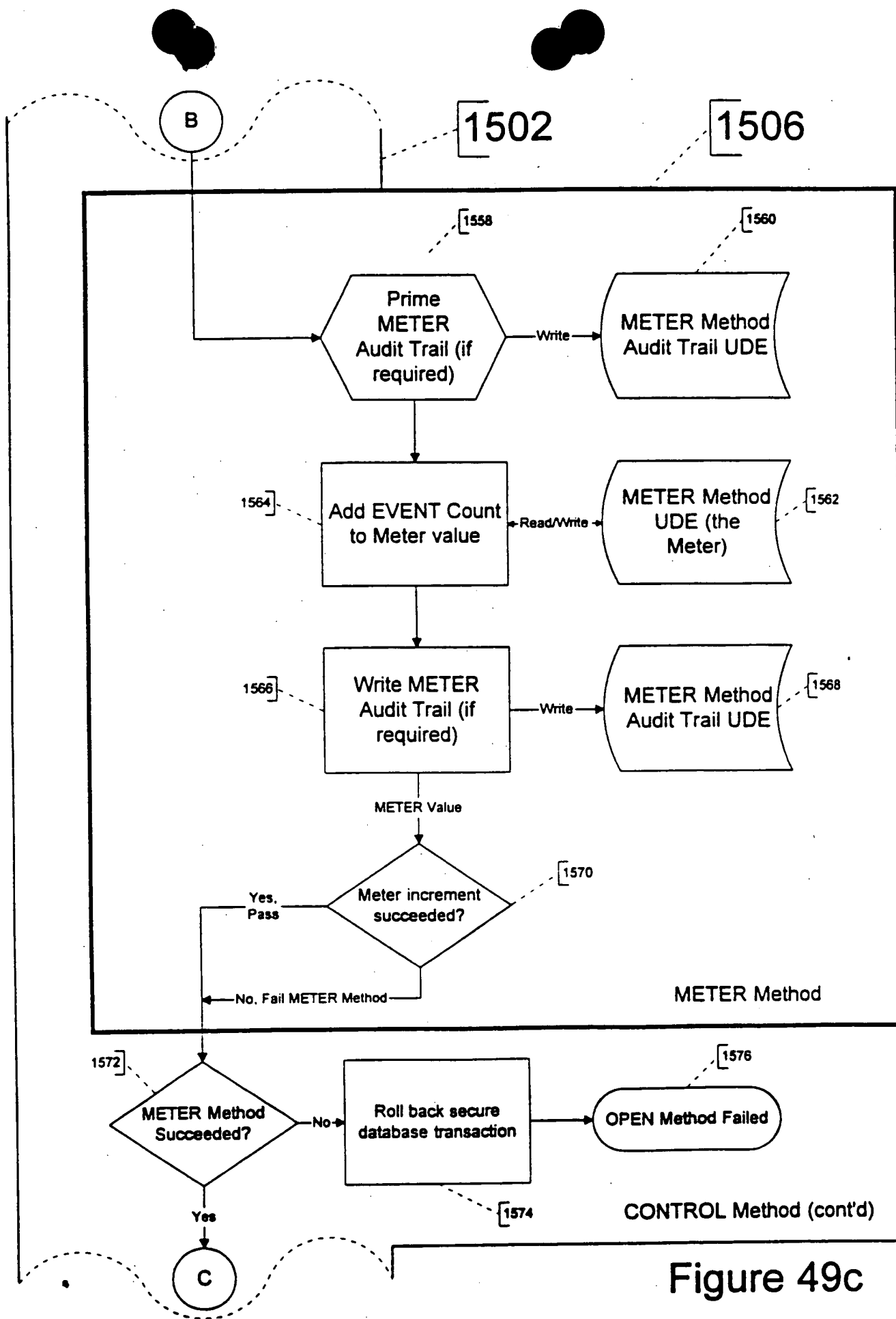


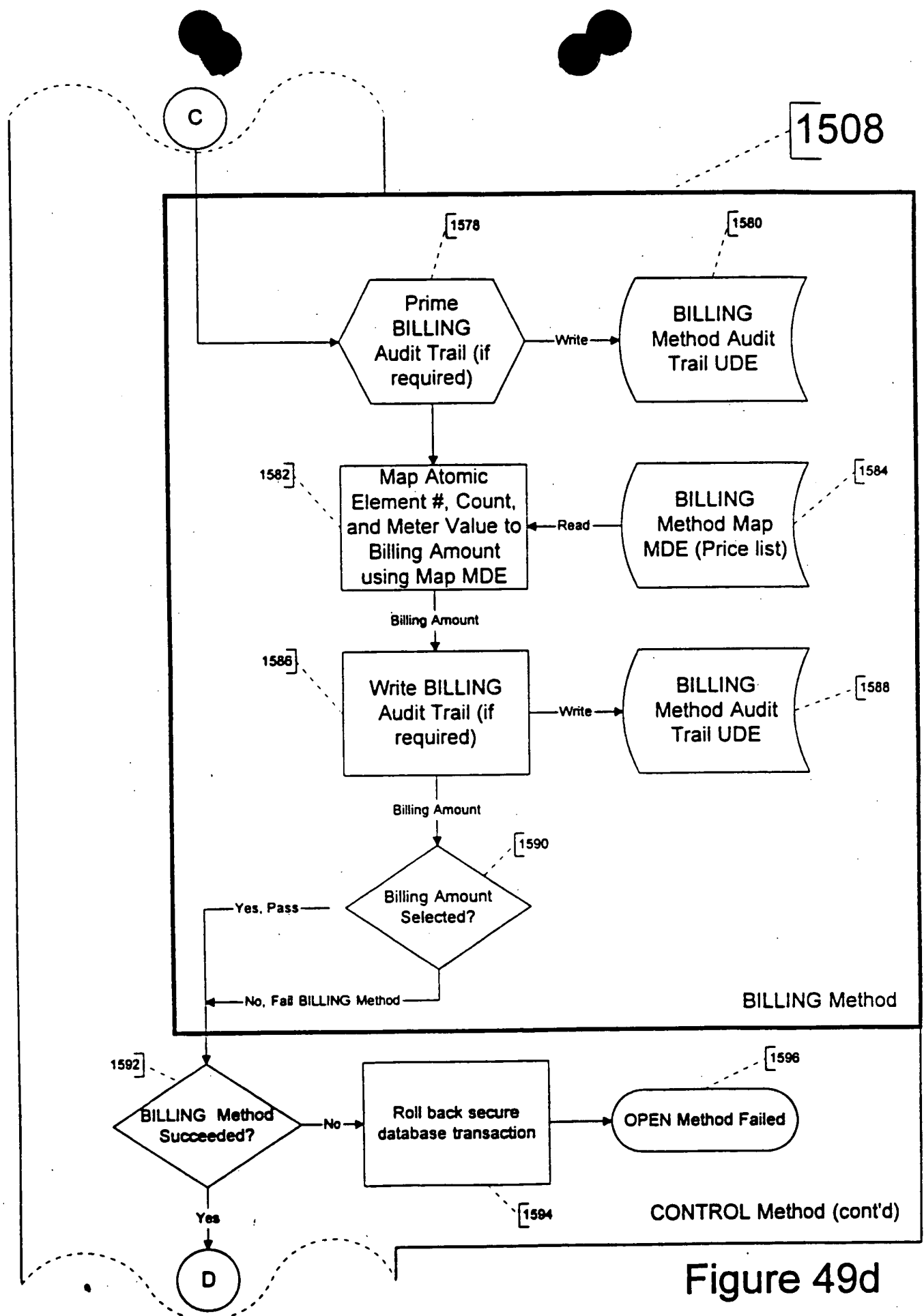
Figure 49b

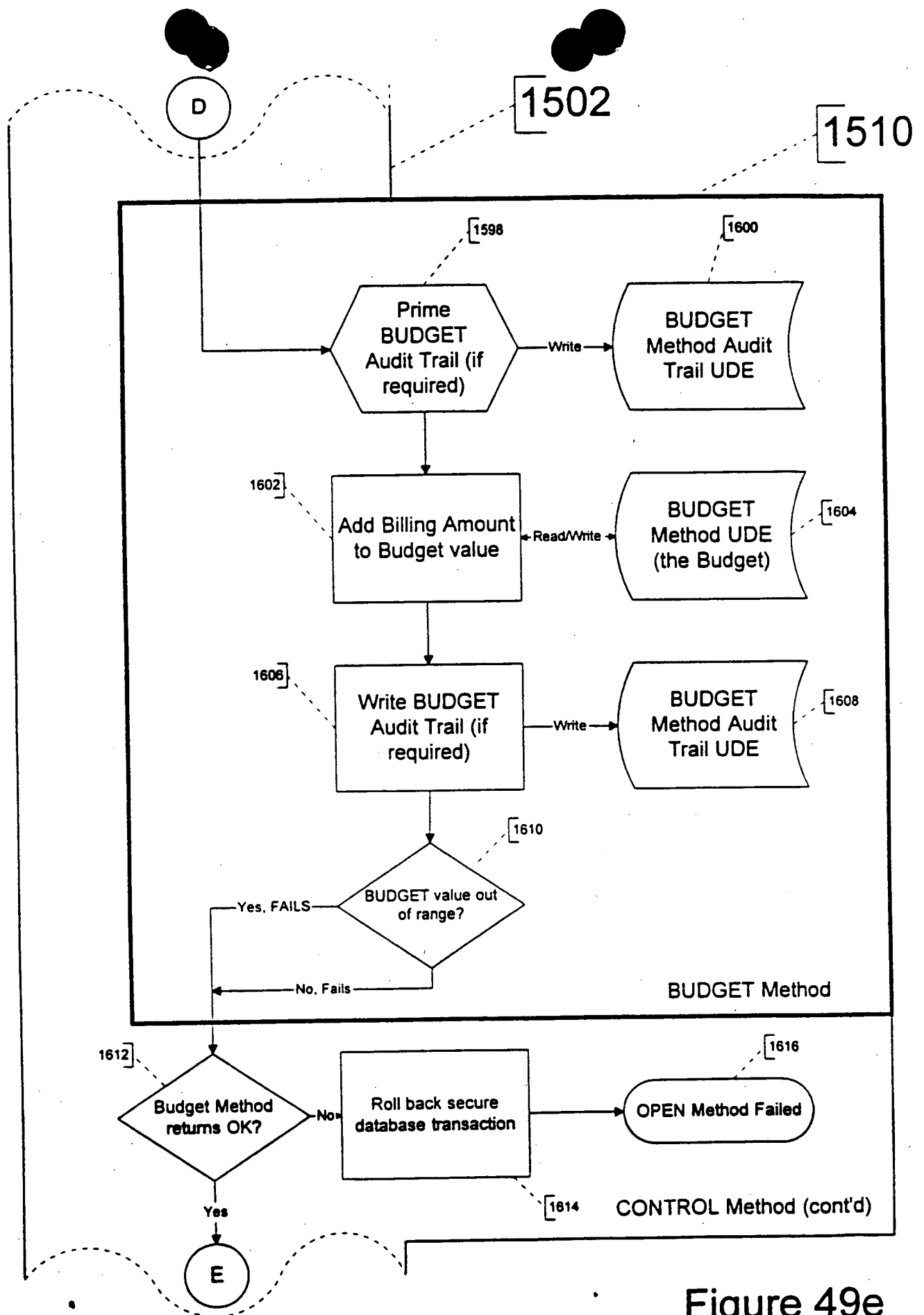


The first of these is the fact that the
  $\text{H}_2$  molecule is not a simple diatomic
 molecule, but a complex molecule with
 a large number of vibrational and
 rotational degrees of freedom. This
 means that the  $\text{H}_2$  molecule can
 absorb energy in a number of different
 ways, and this makes it difficult to
 model its behavior.



**Figure 49c**





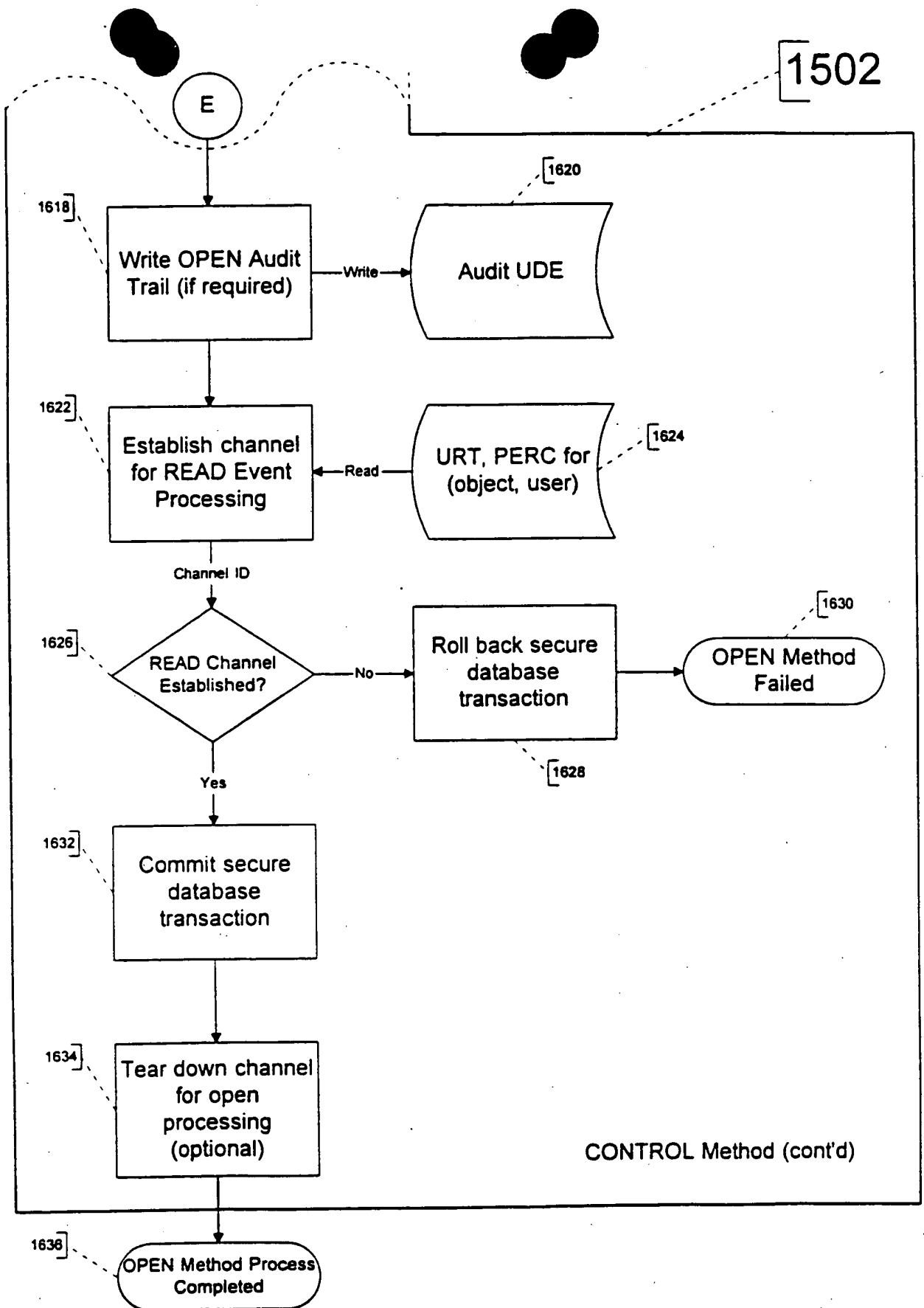


Figure 49f

# READ Method Use Process Flow

1652

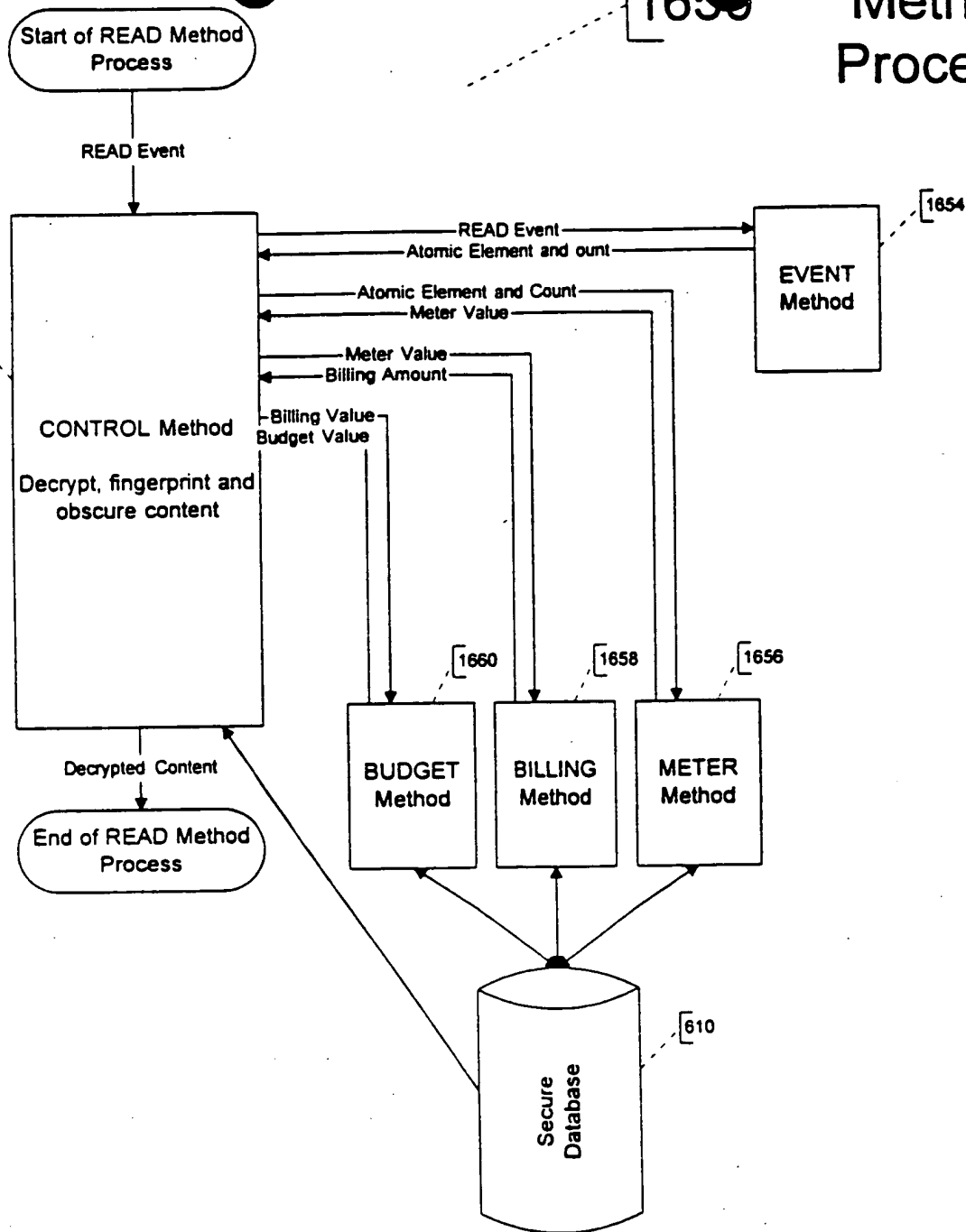


Figure 50

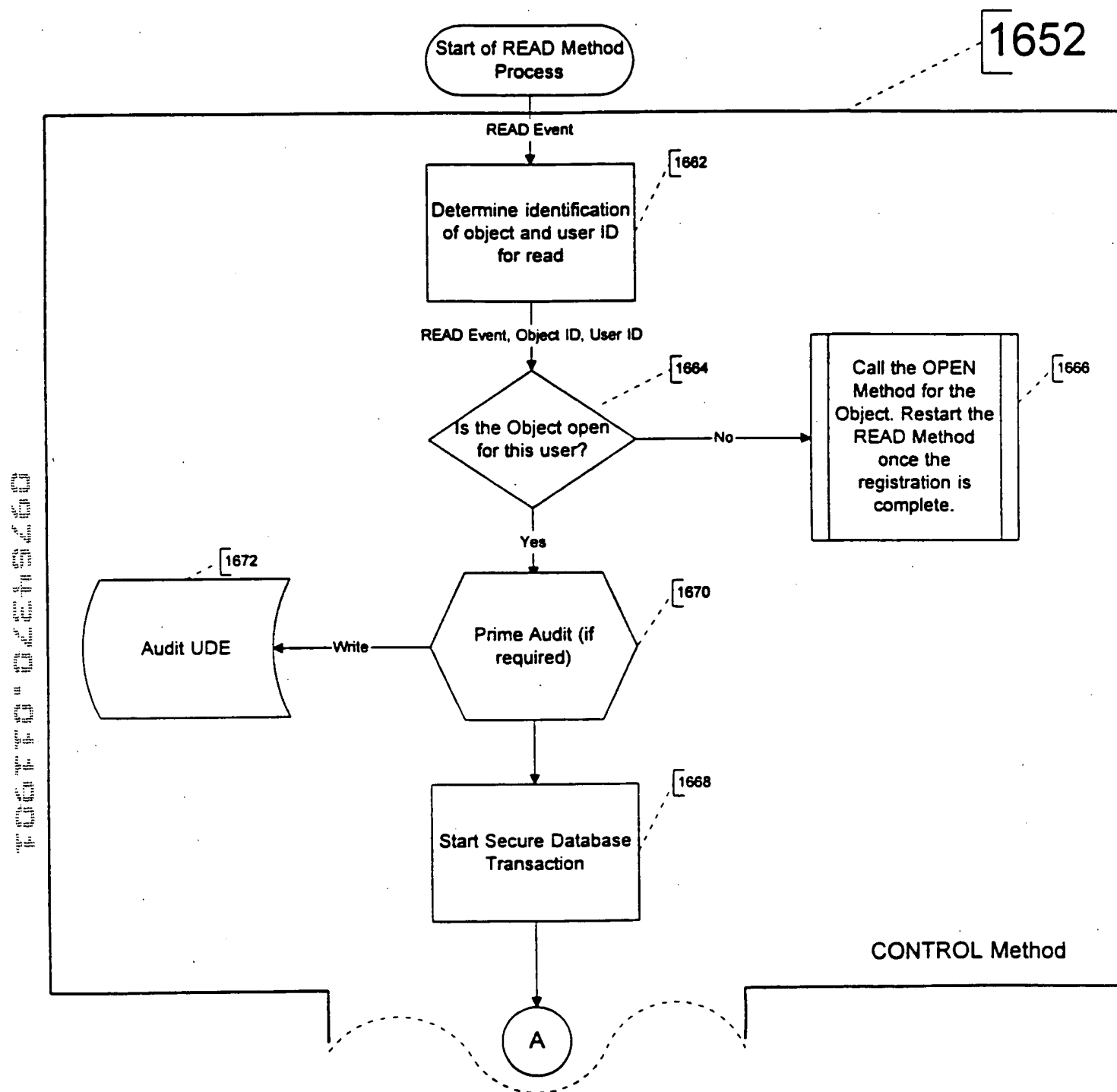


Figure 50a

CONFIDENTIAL

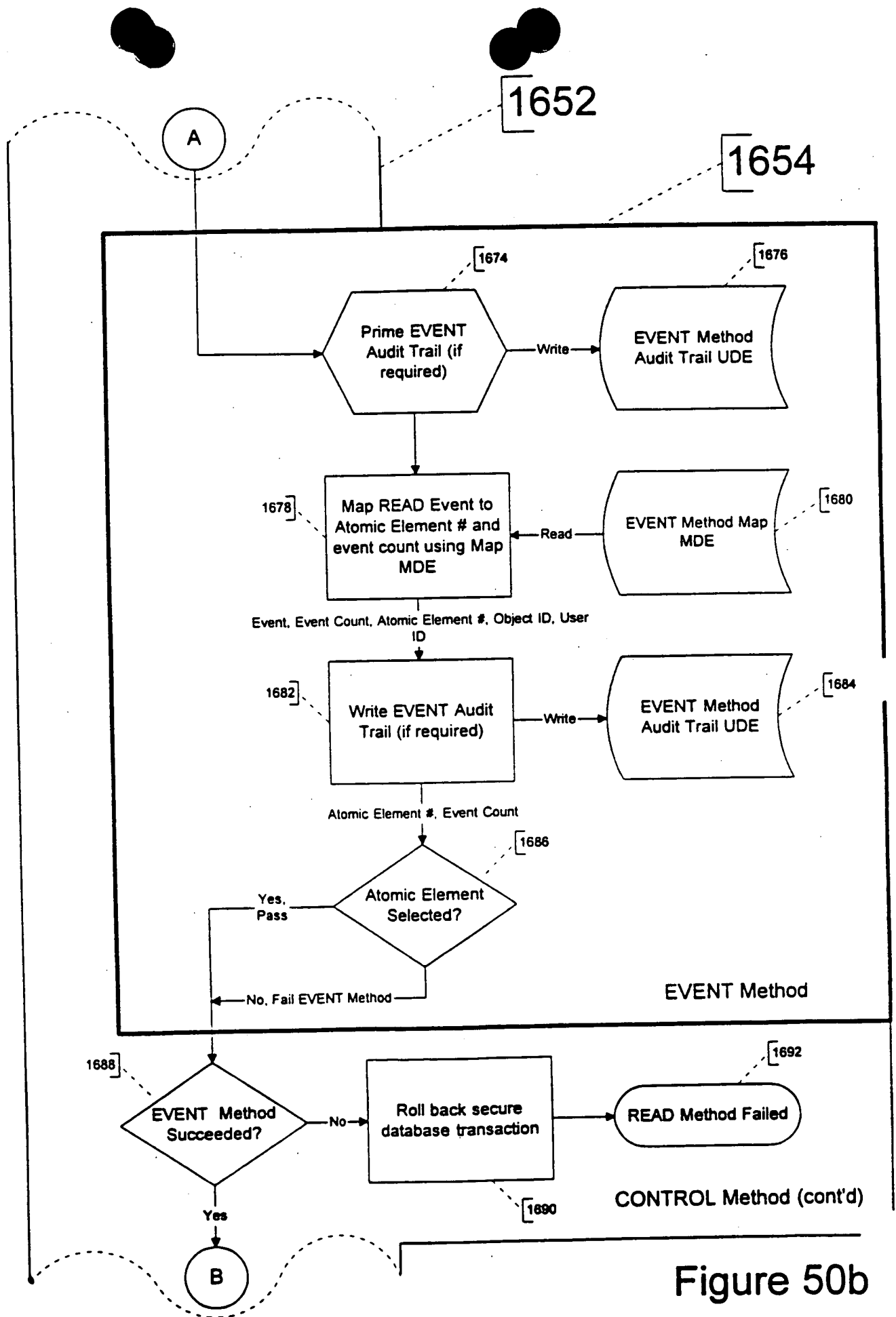


Figure 50b

1652 1656 1694 1698 1702 1704 1706 1708 1710 1712

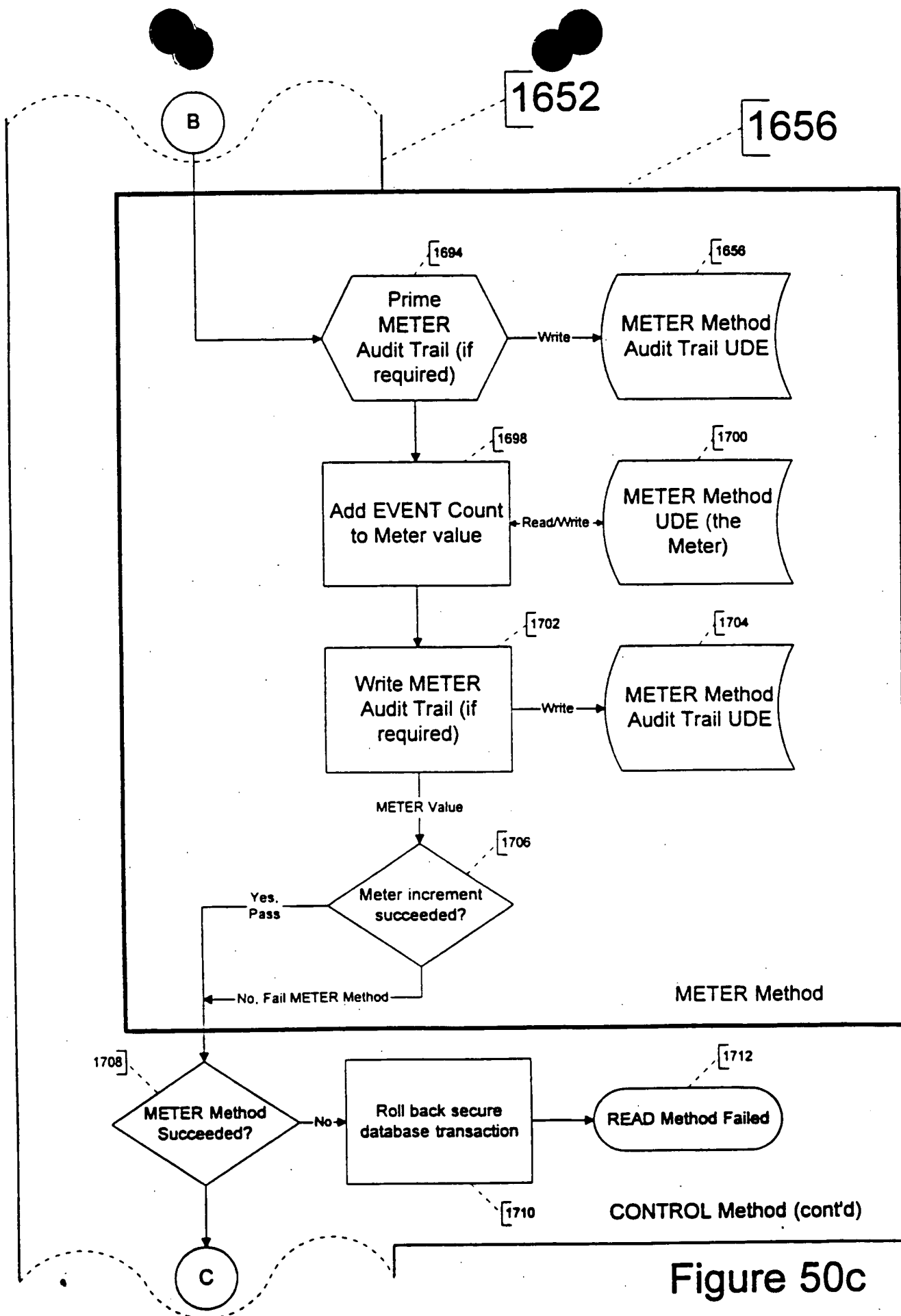


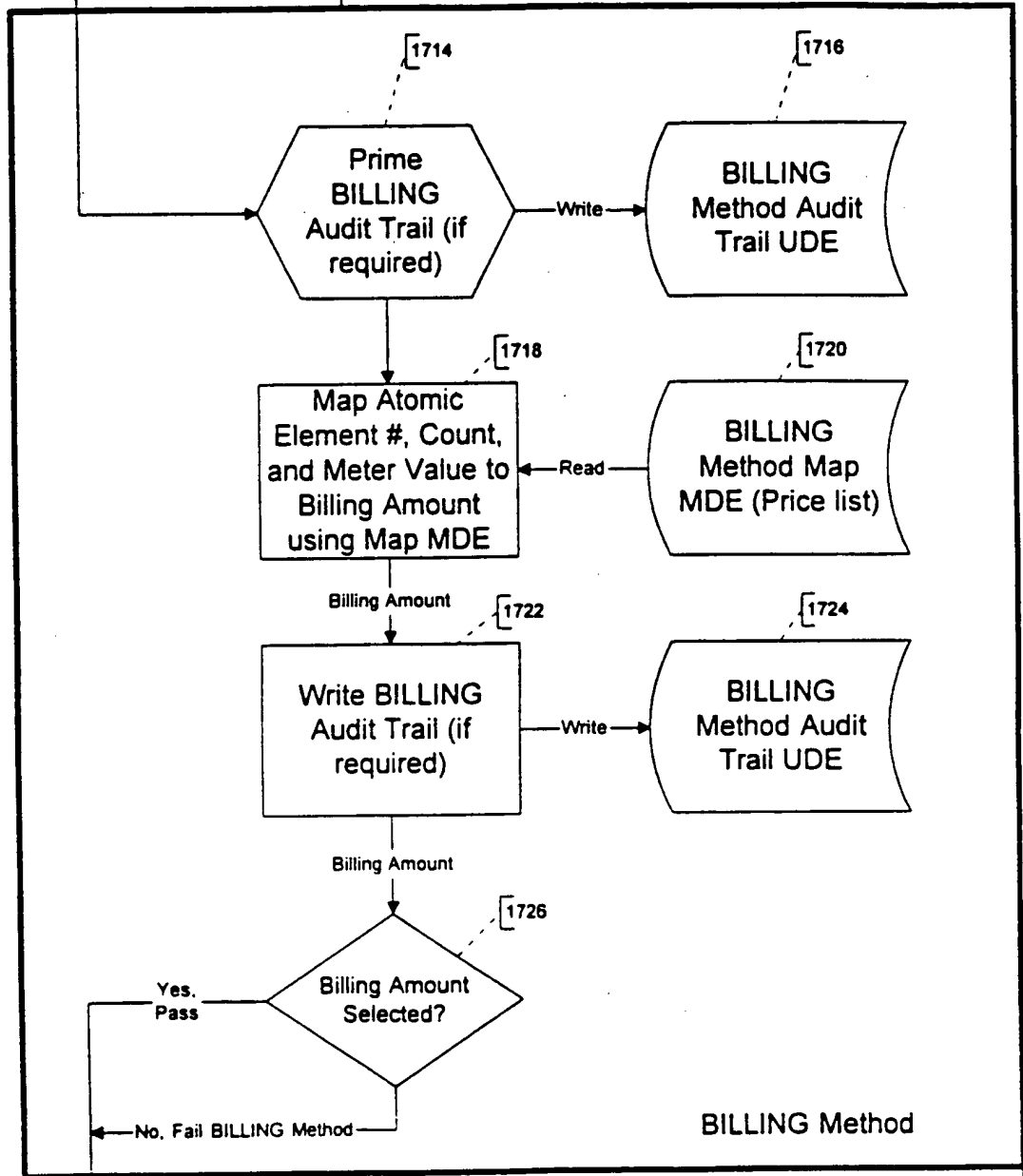
Figure 50c



1652

1658

C



1728

BILLING Method Succeeded?

No

Roll back secure database transaction

READ Method Failed

1732

1730

CONTROL Method (cont'd)

D

Figure 50d

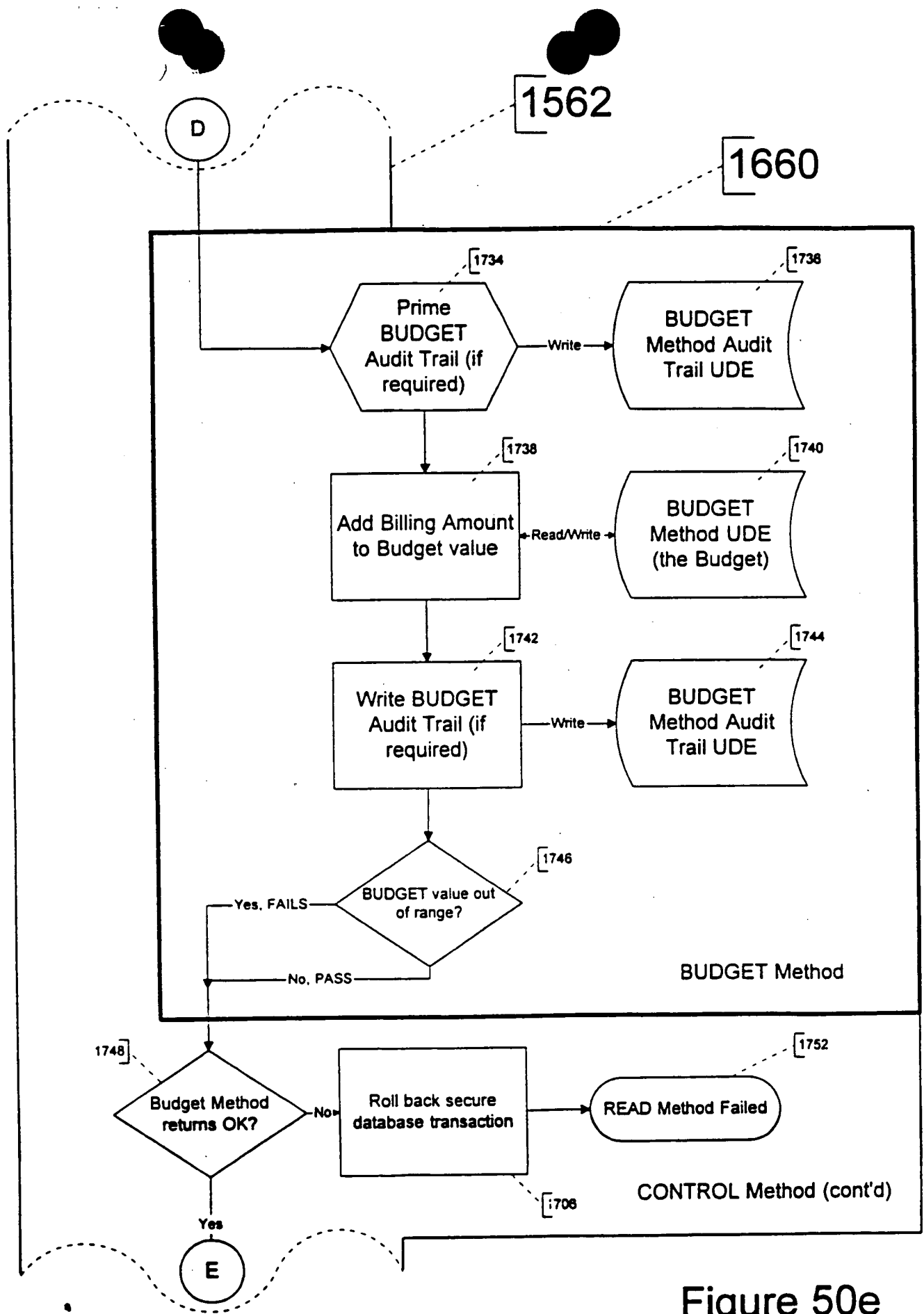
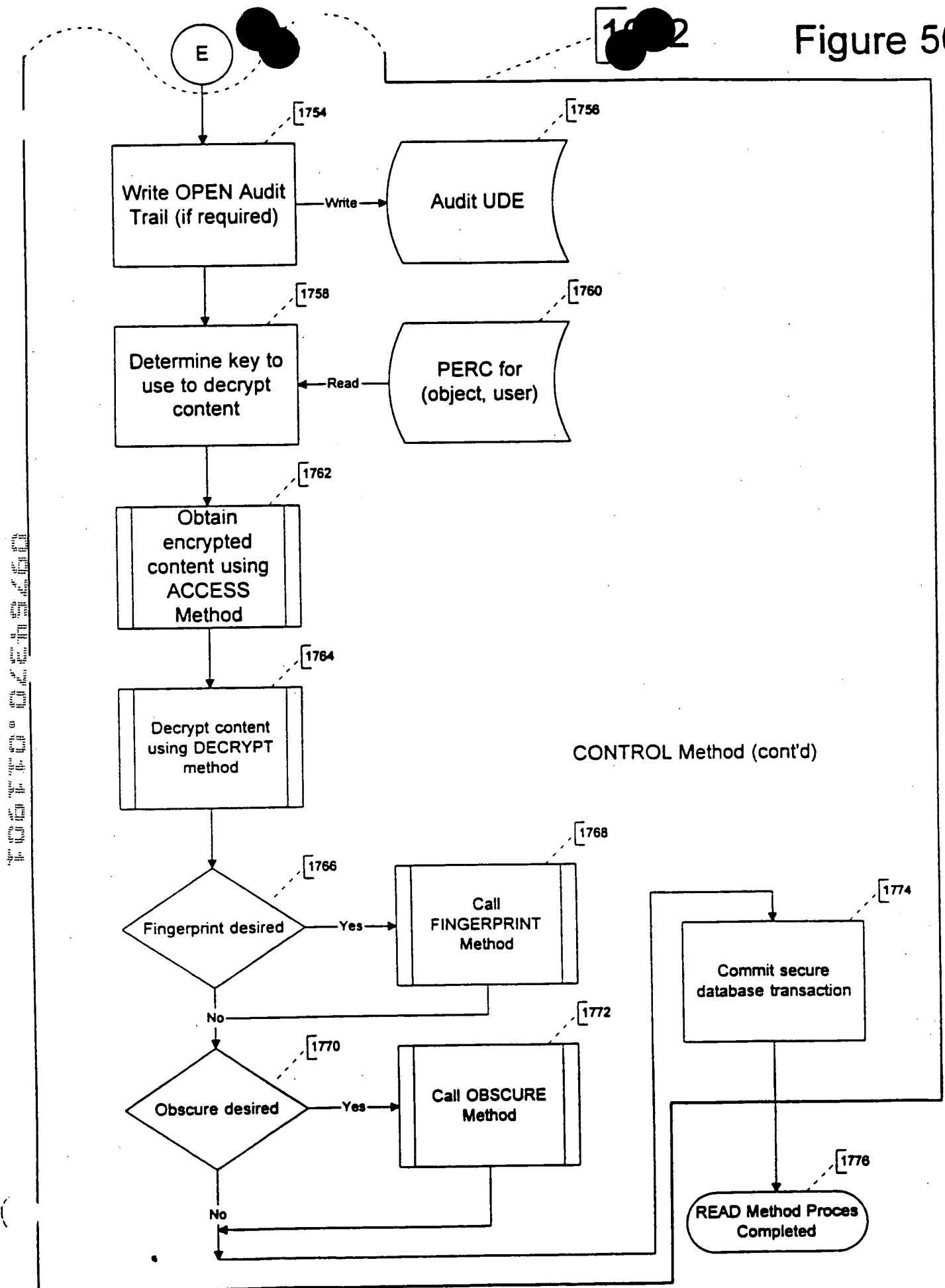


Figure 50e

Figure 50f



# WRITE Method Use Process Flow

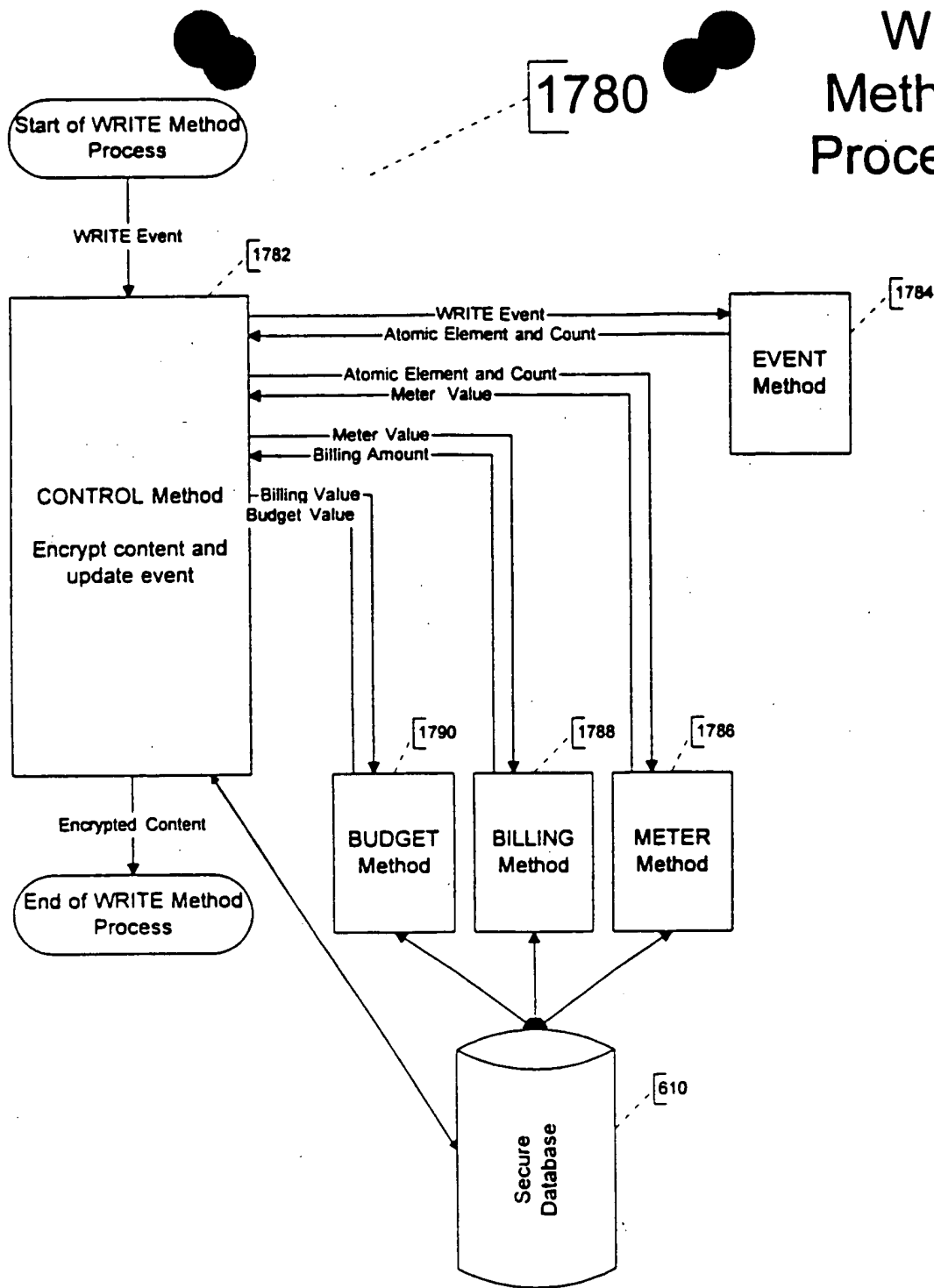


Figure 51

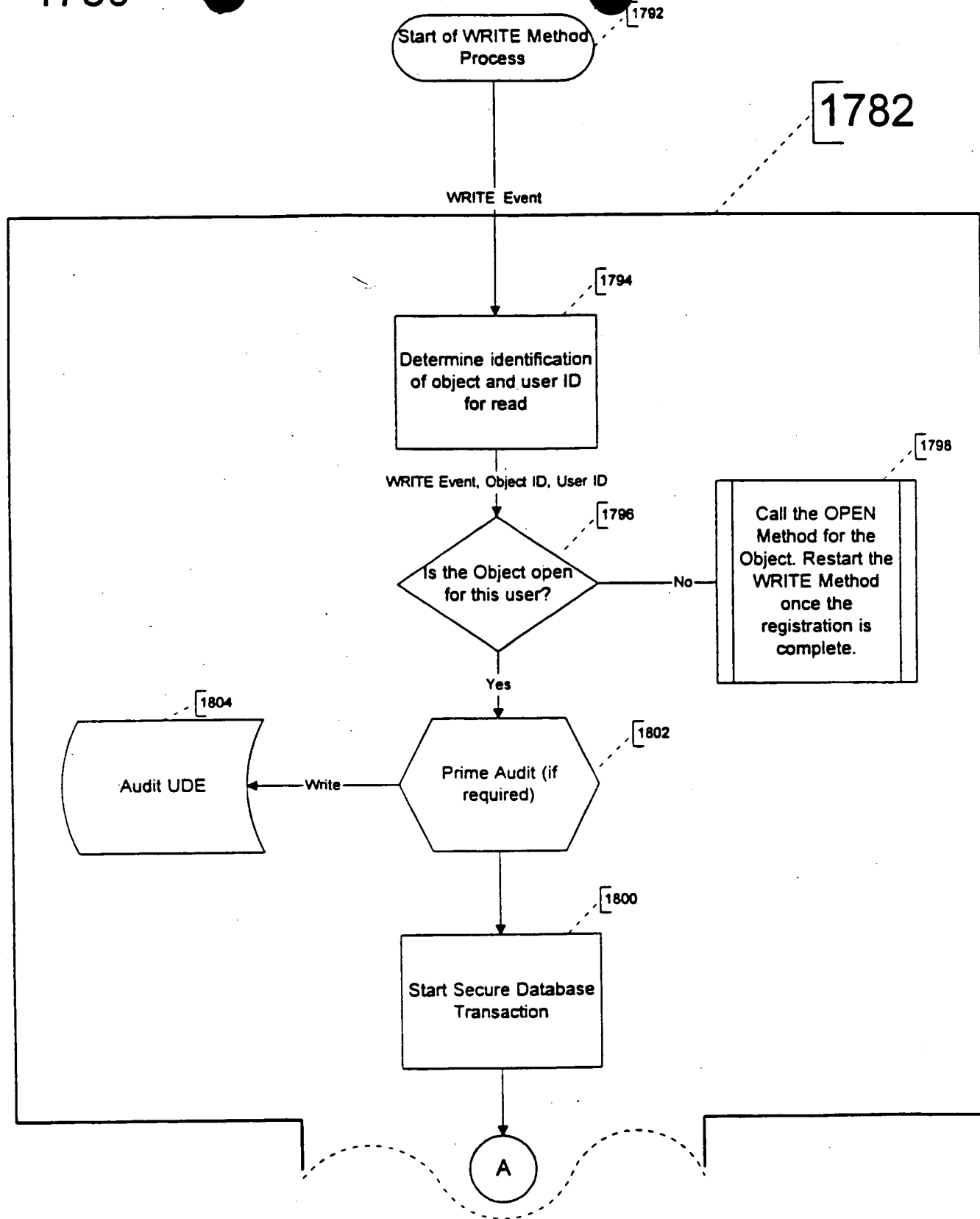


Figure 51a

1782 1784 1806 1808 1810 1812 1814 1816 1818 1820 1822 1824 1826

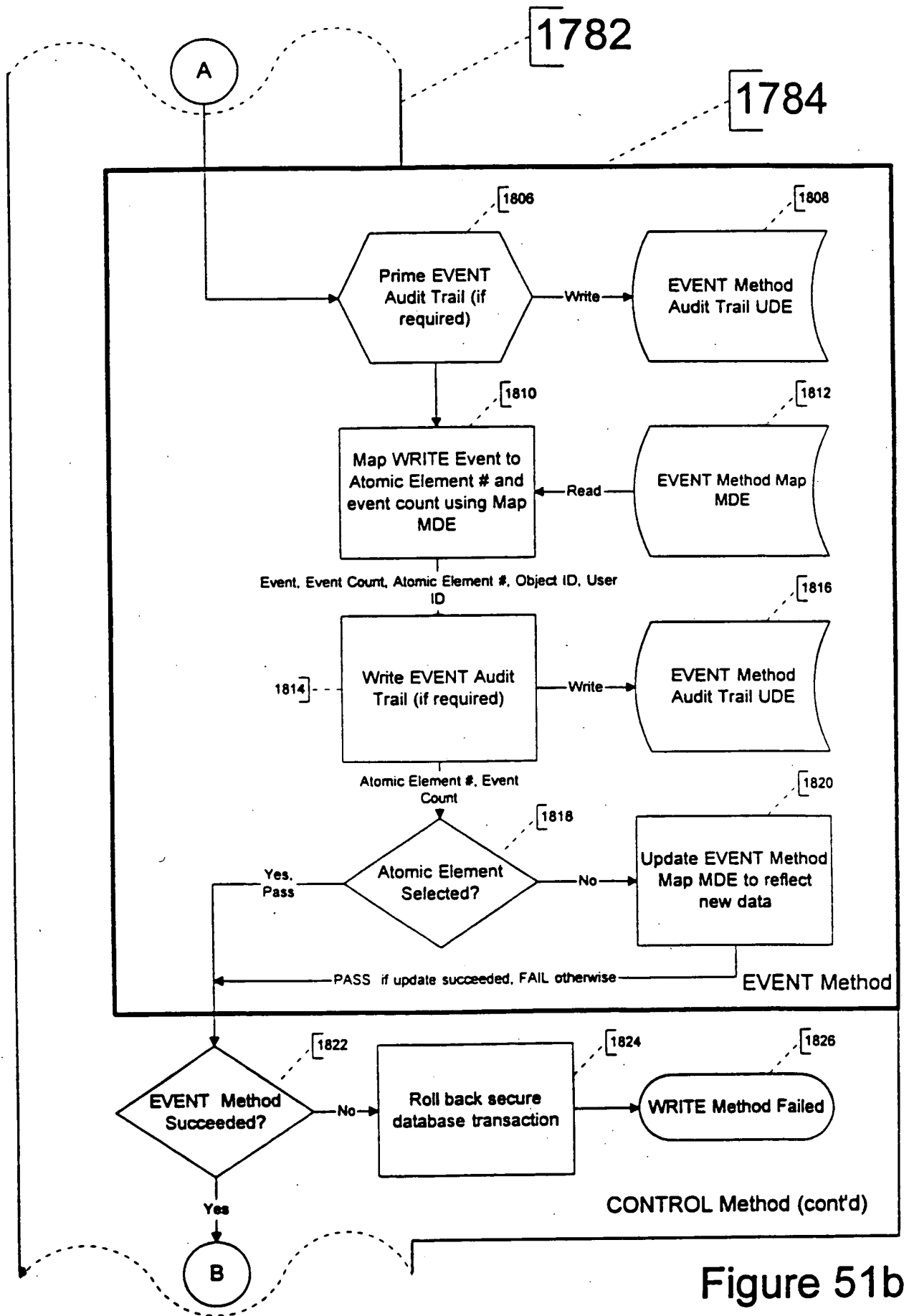


Figure 51b

TOP SECRET

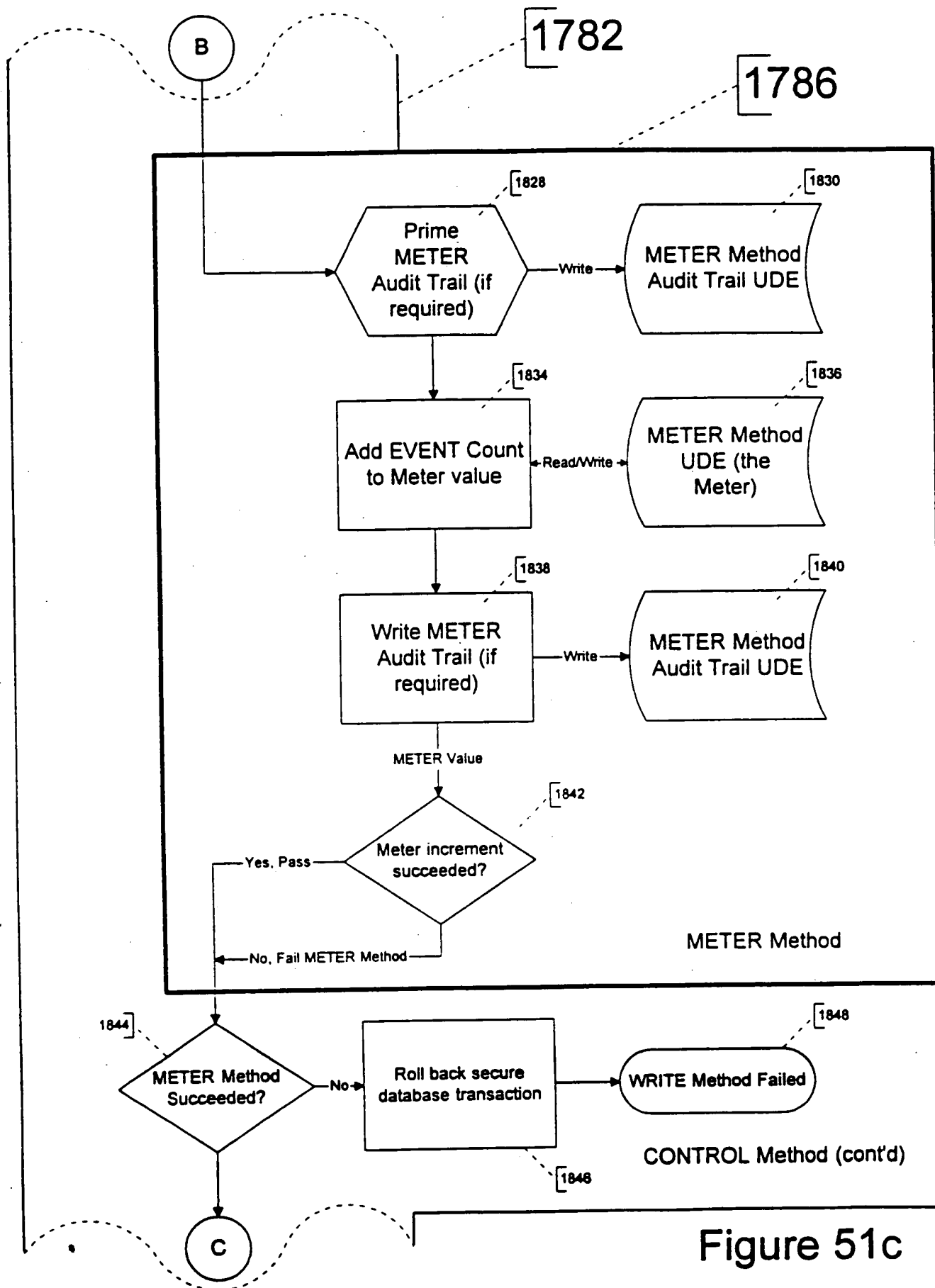


Figure 51c

TOP SECRET

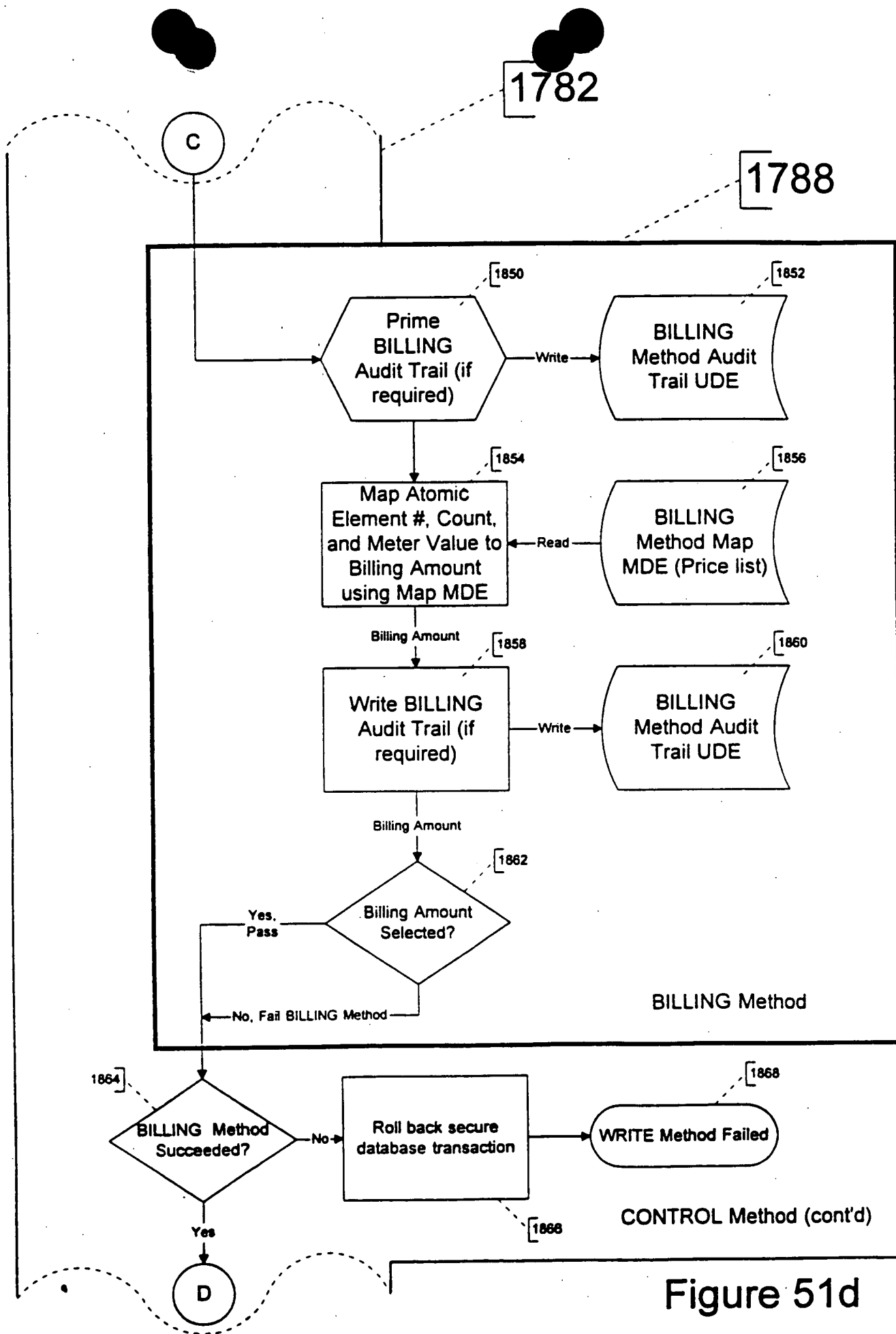


Figure 51d



1782 1790 1870 1872 1874 1876 1878 1880 1882 1884 1886 1888

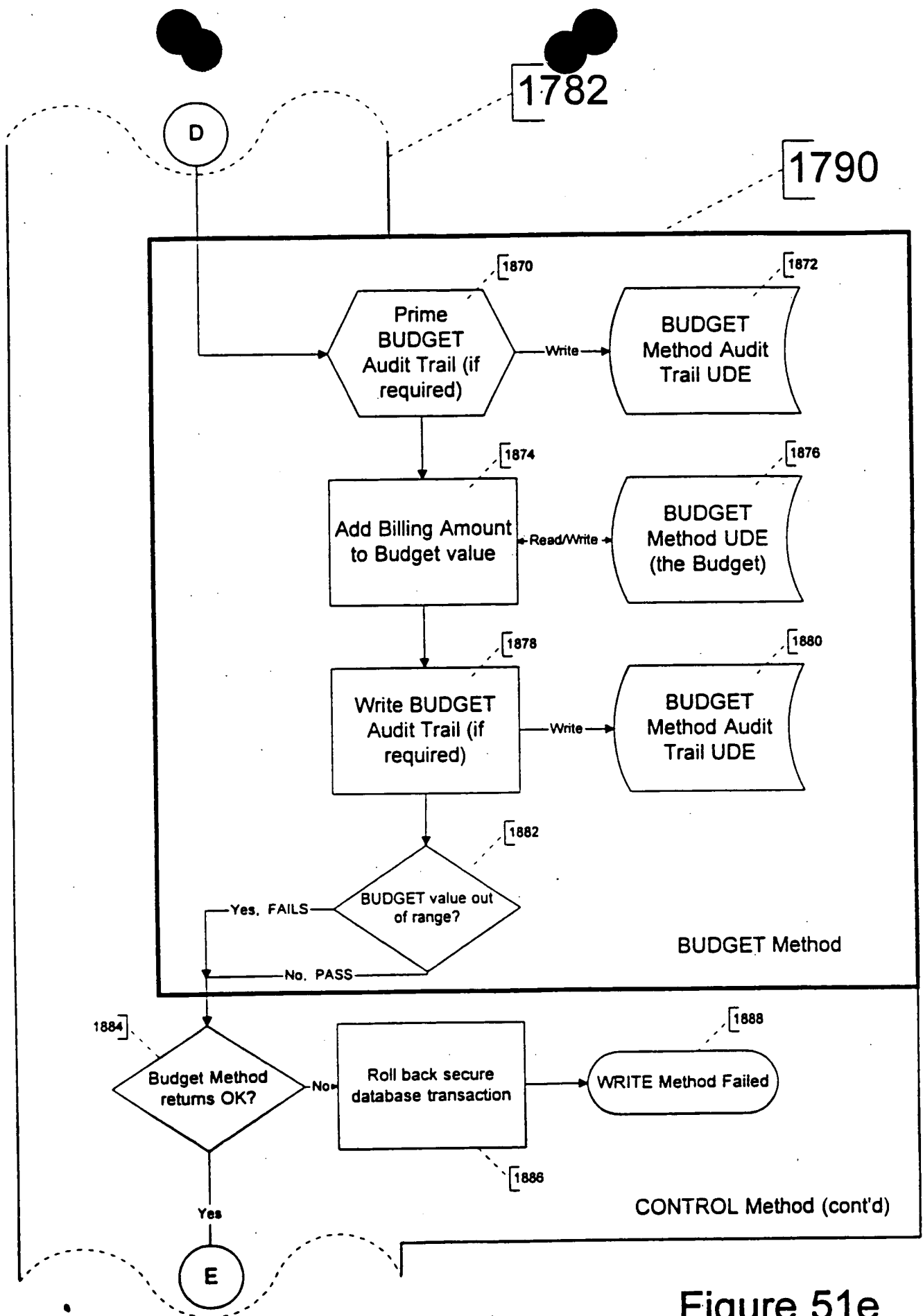


Figure 51e

1920

# CLOSE Method Process Flow

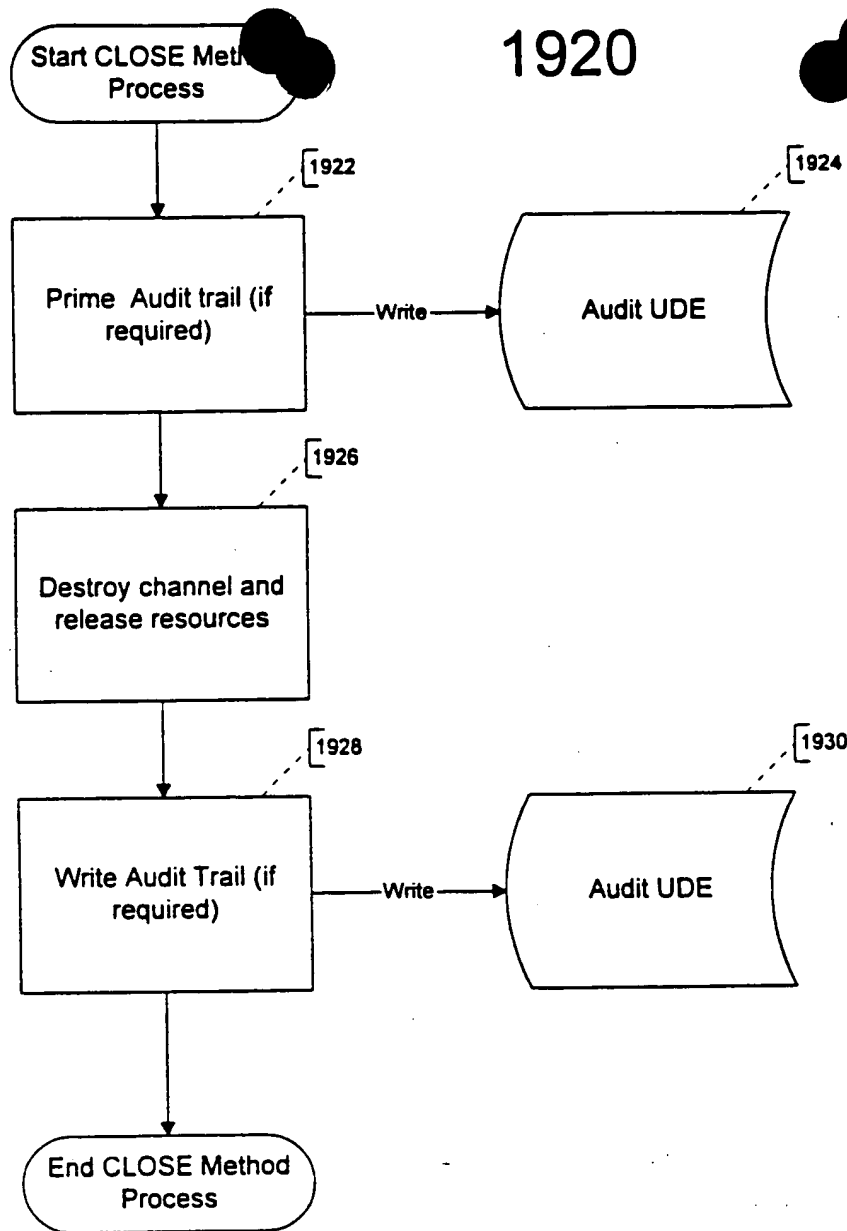


Figure 52



# Sample EVENT Method Mapping Process

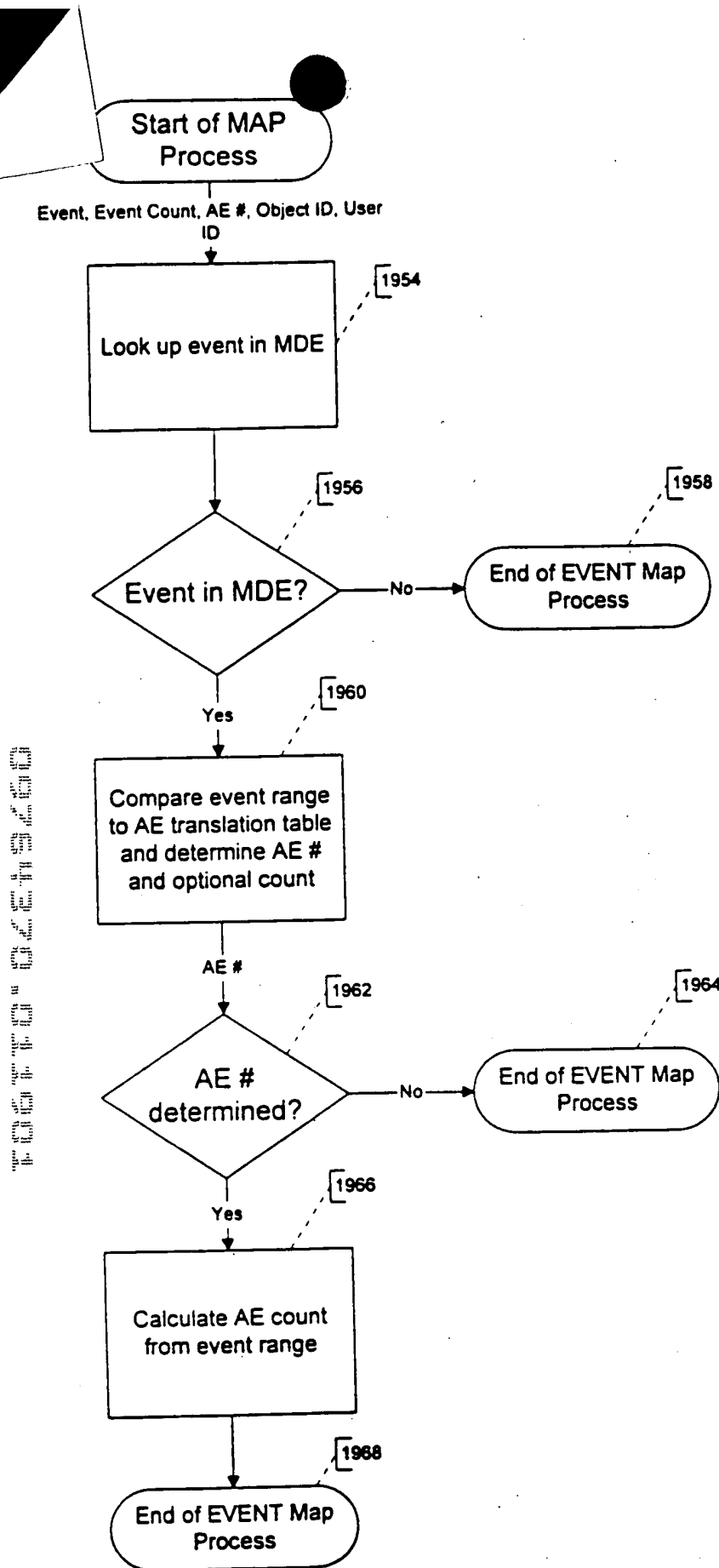


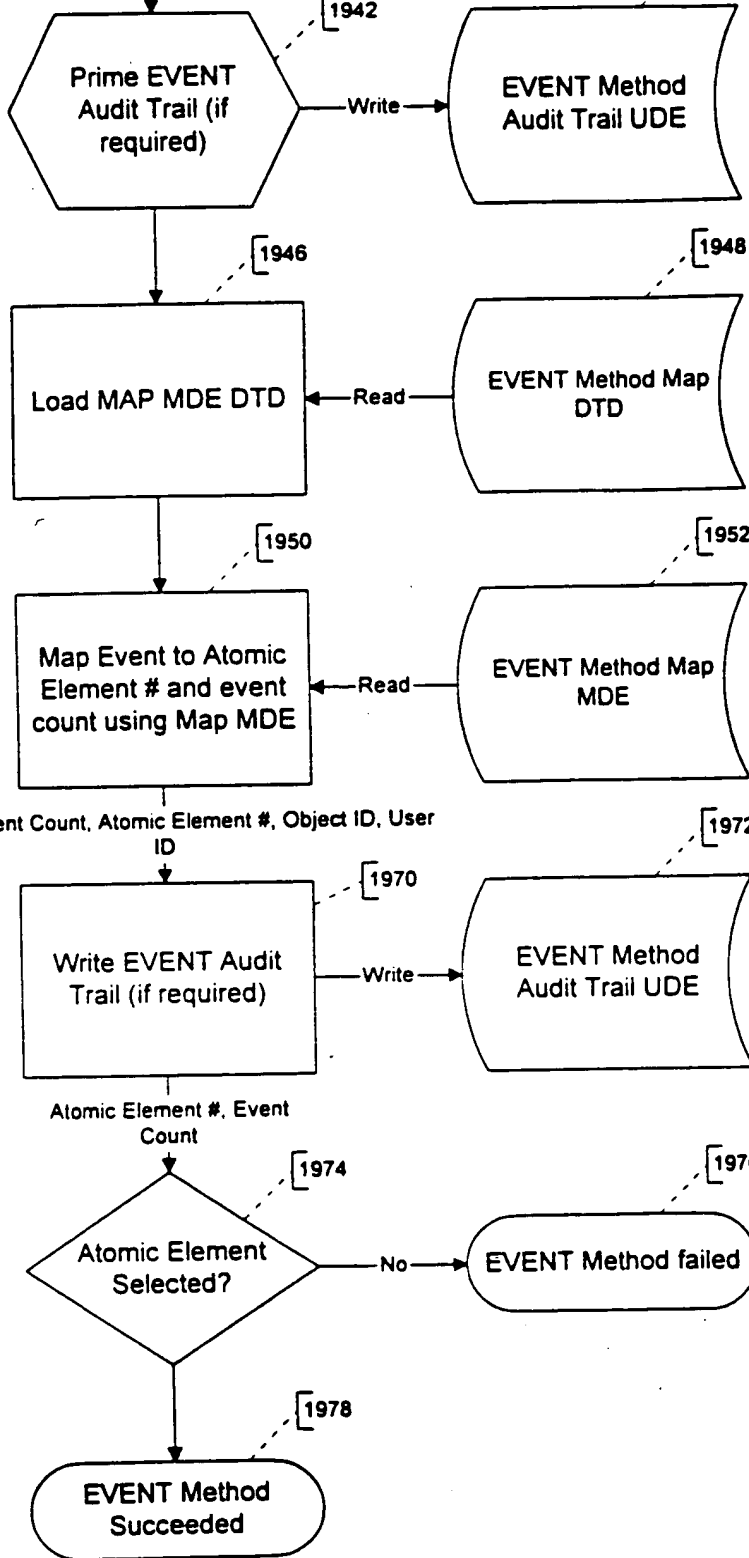
Figure 53b

# EVENT Method Process Flows

1940

EVENT Method S

EVENT, Event Count, Event Parameters



EVENT Method S

Figure 53a

2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024 2026

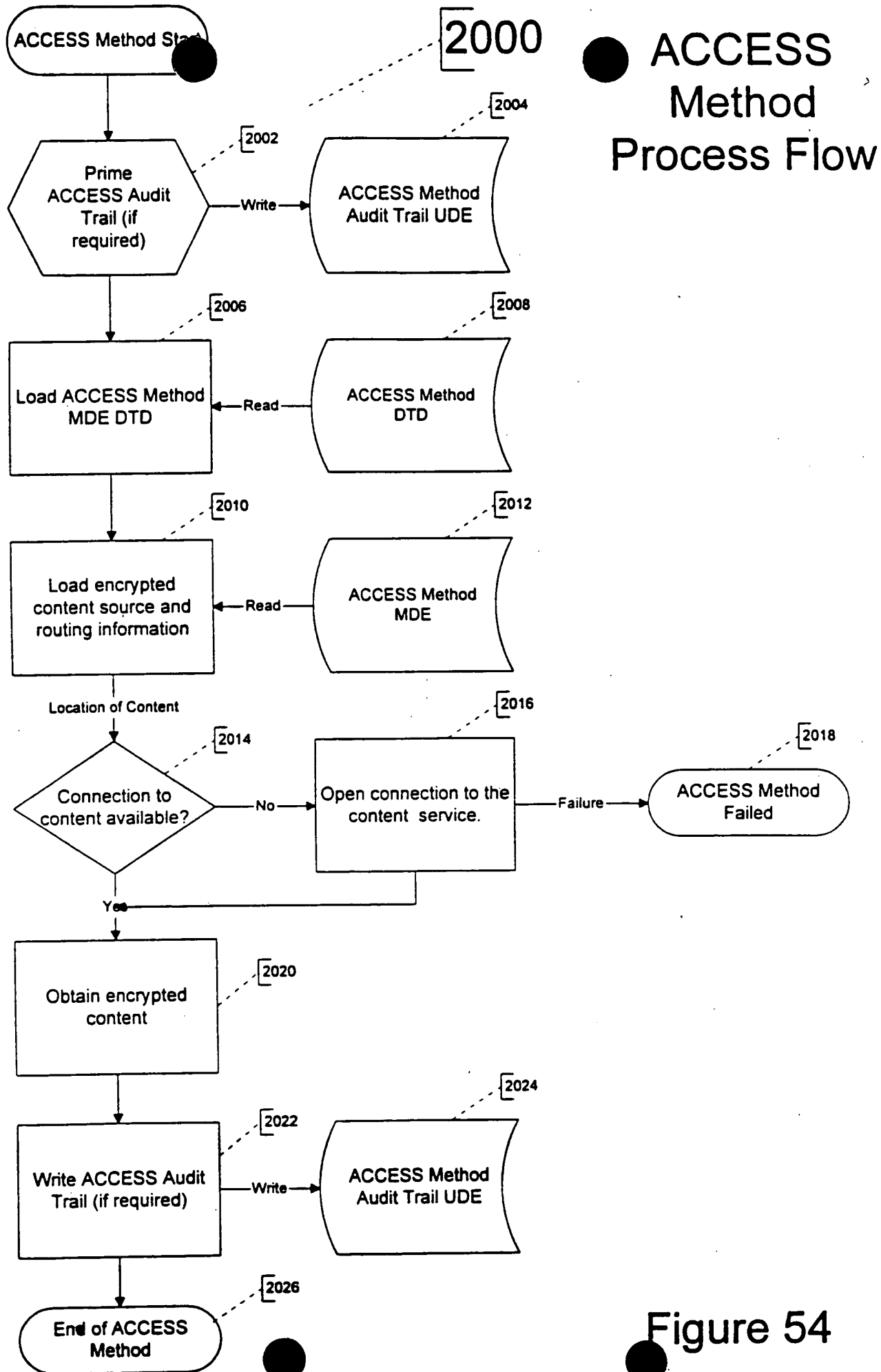


Figure 54

# BILLING Method Process Flows

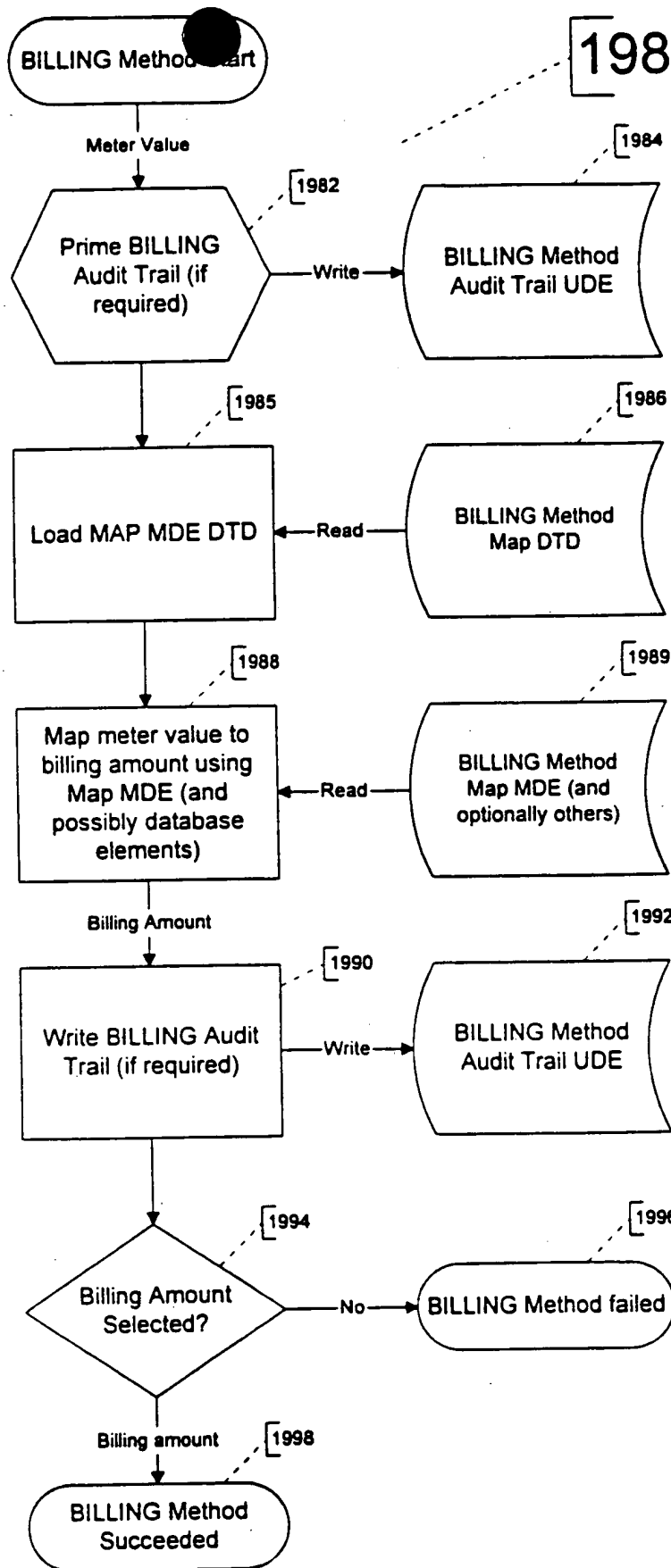


Figure 53c

# ENCRYPT Method Process Flow

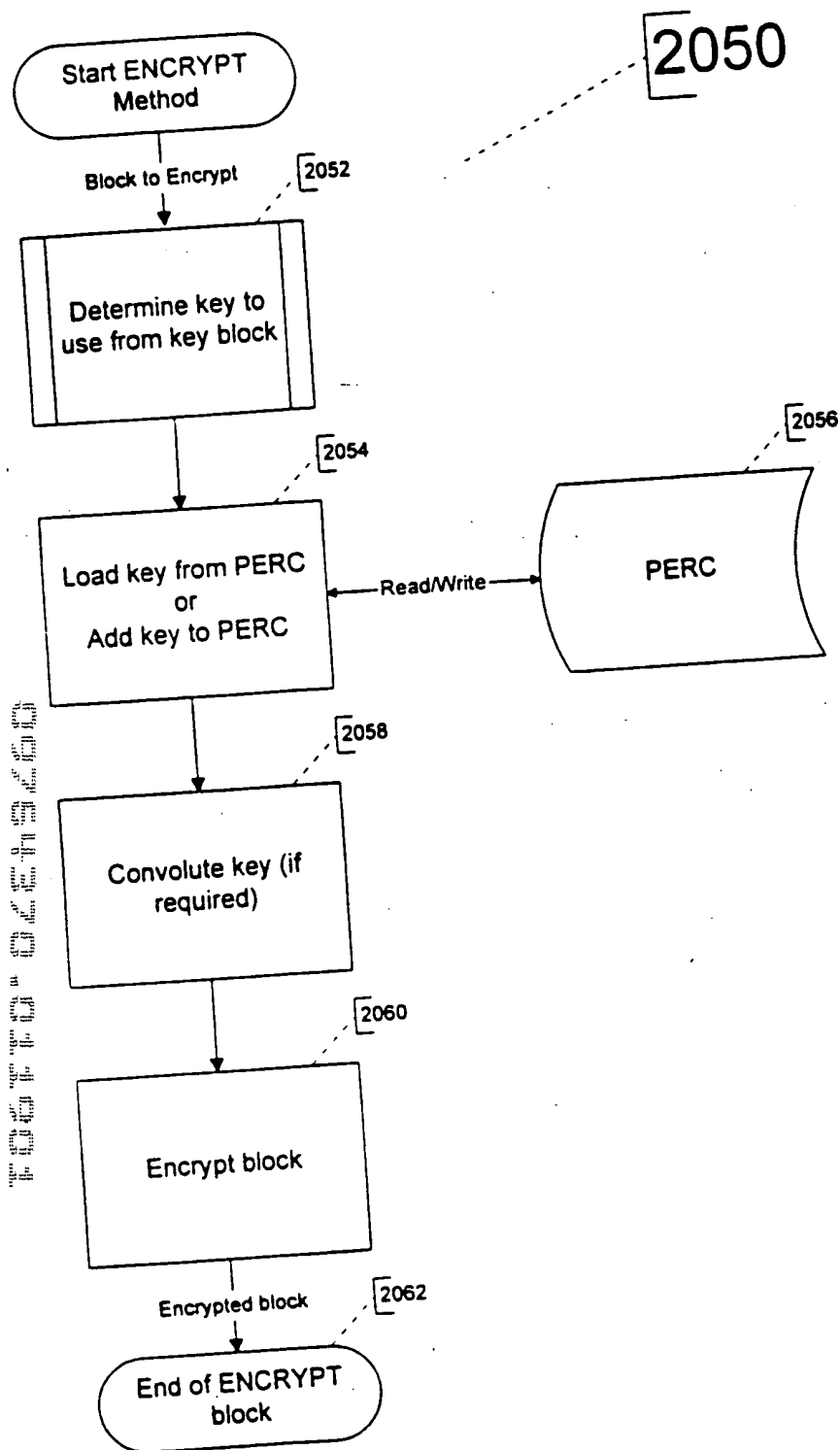
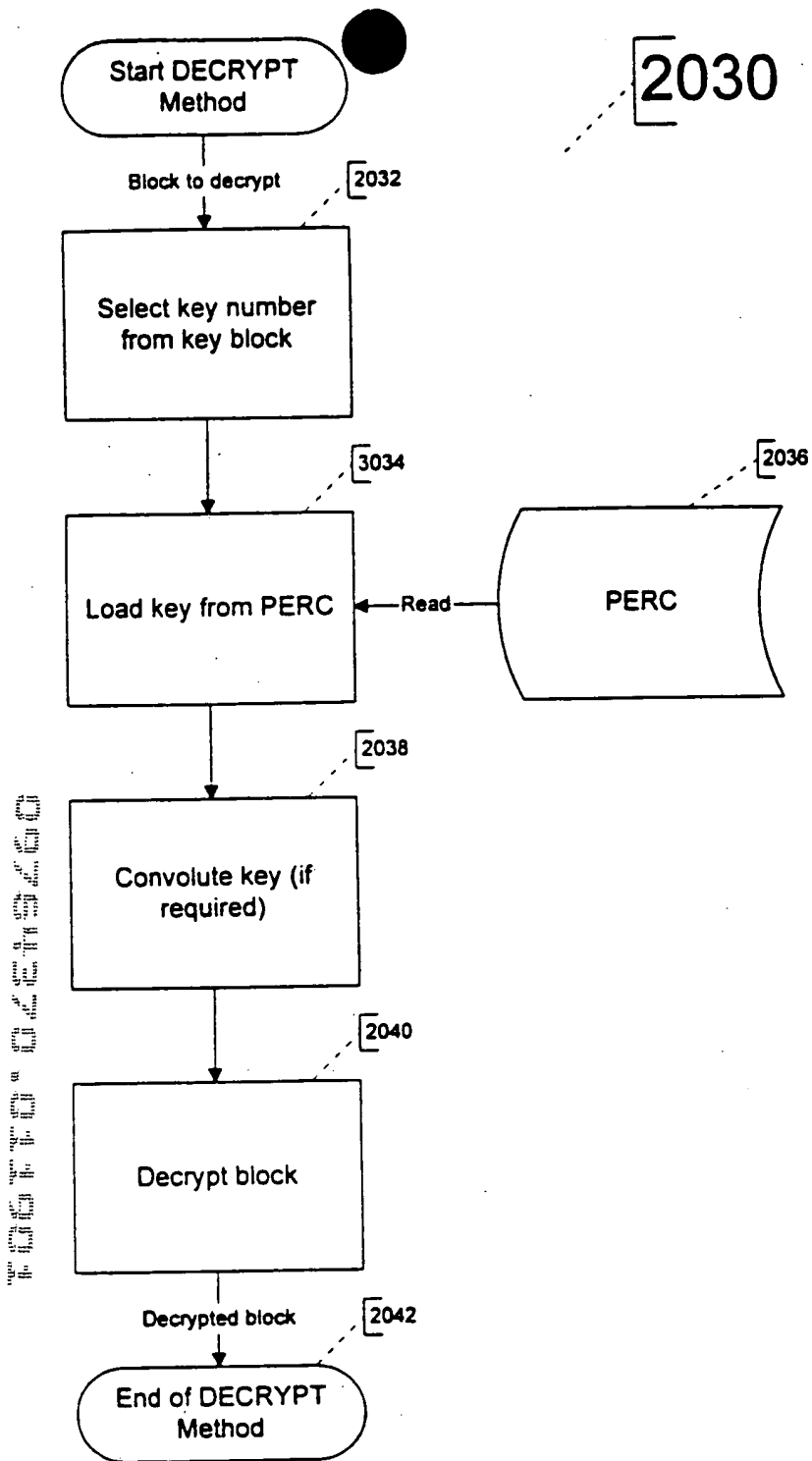


Figure 55b



# ● DECRYPT Method Process Flow



● Figure 55a

# EXTRACT Method Process Flow

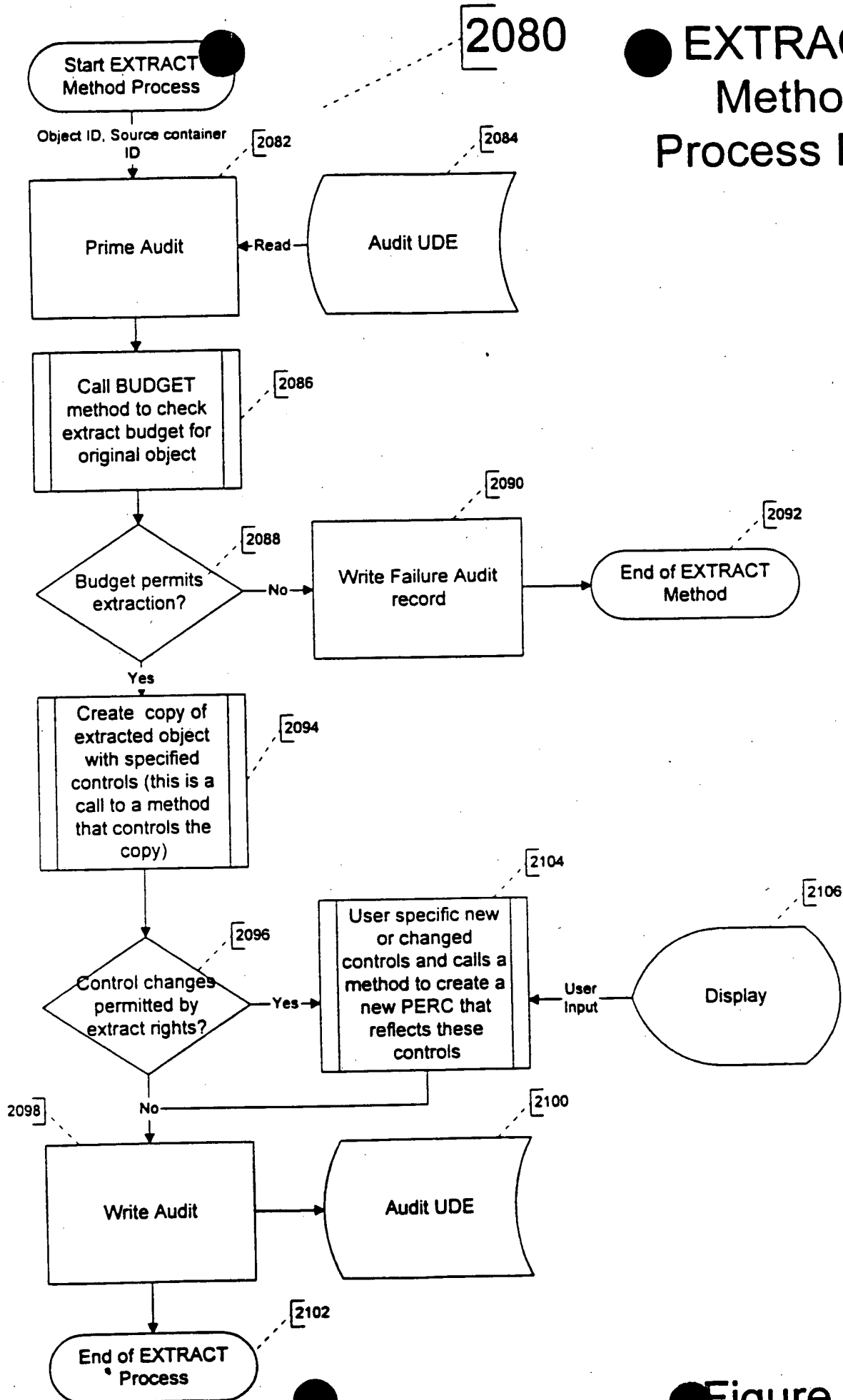


Figure 57a

2070

# CONTENT Method Process Flow

2078

2072

2074

2076

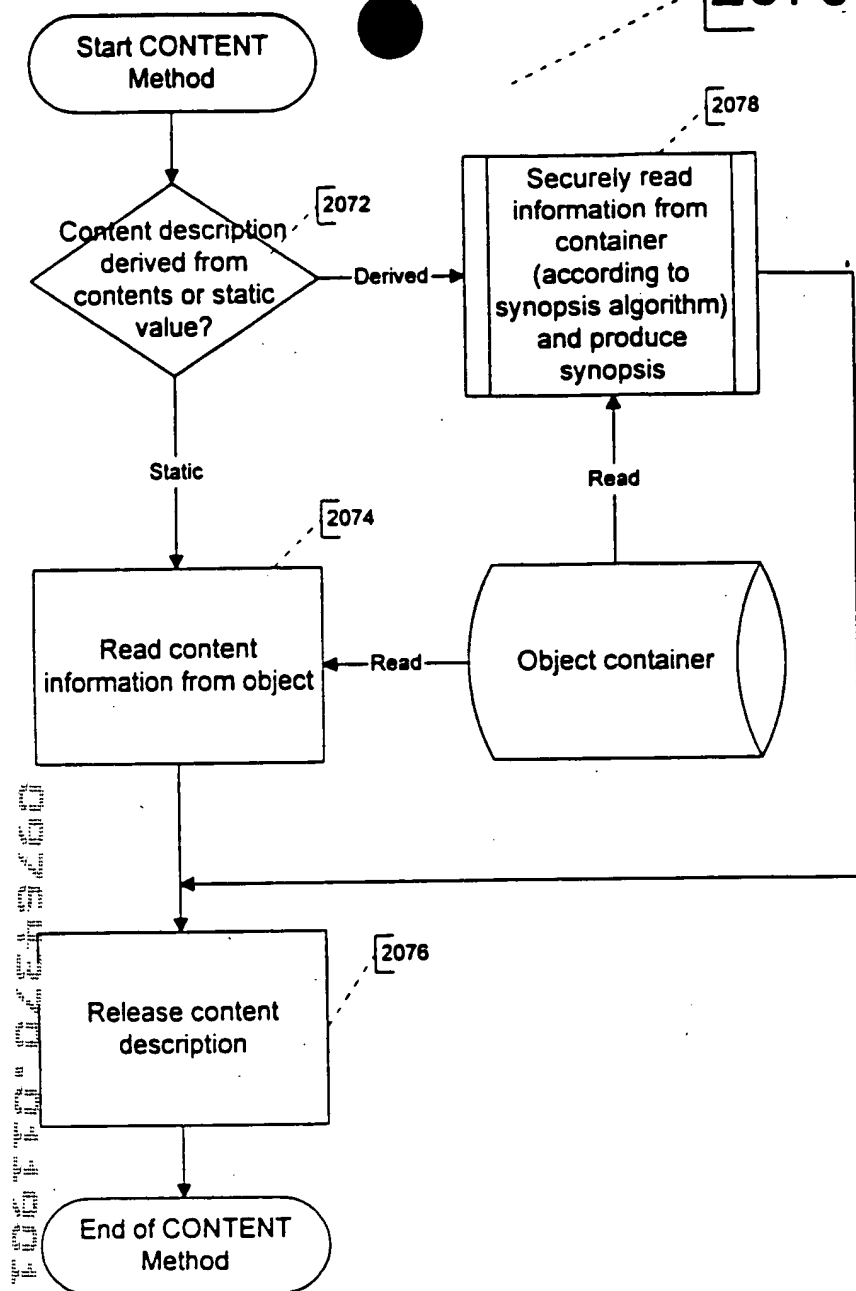


Figure 56

# OBSCURE Method Process Flow

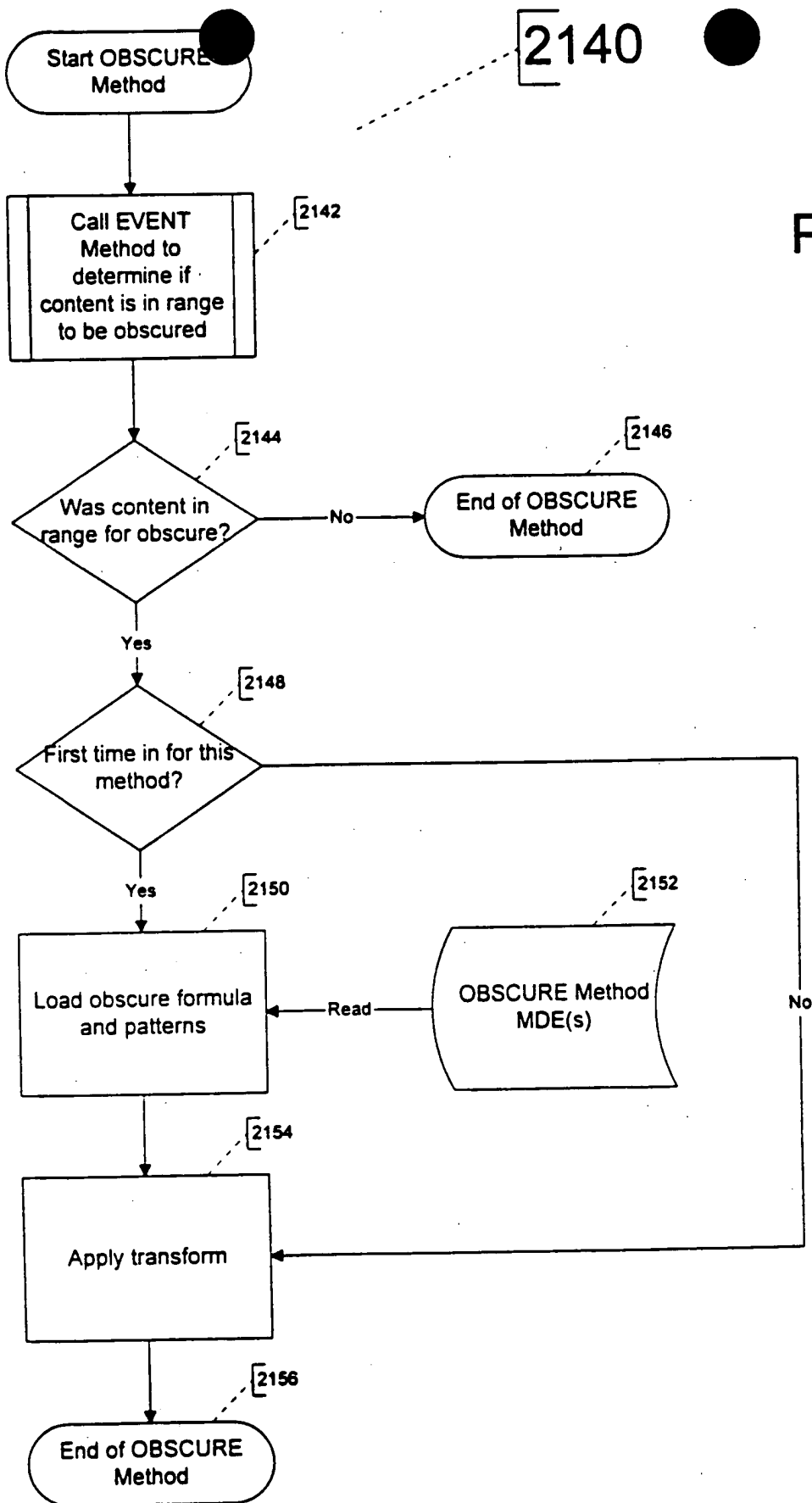


Figure 58a

# EMBED Method Process Flow

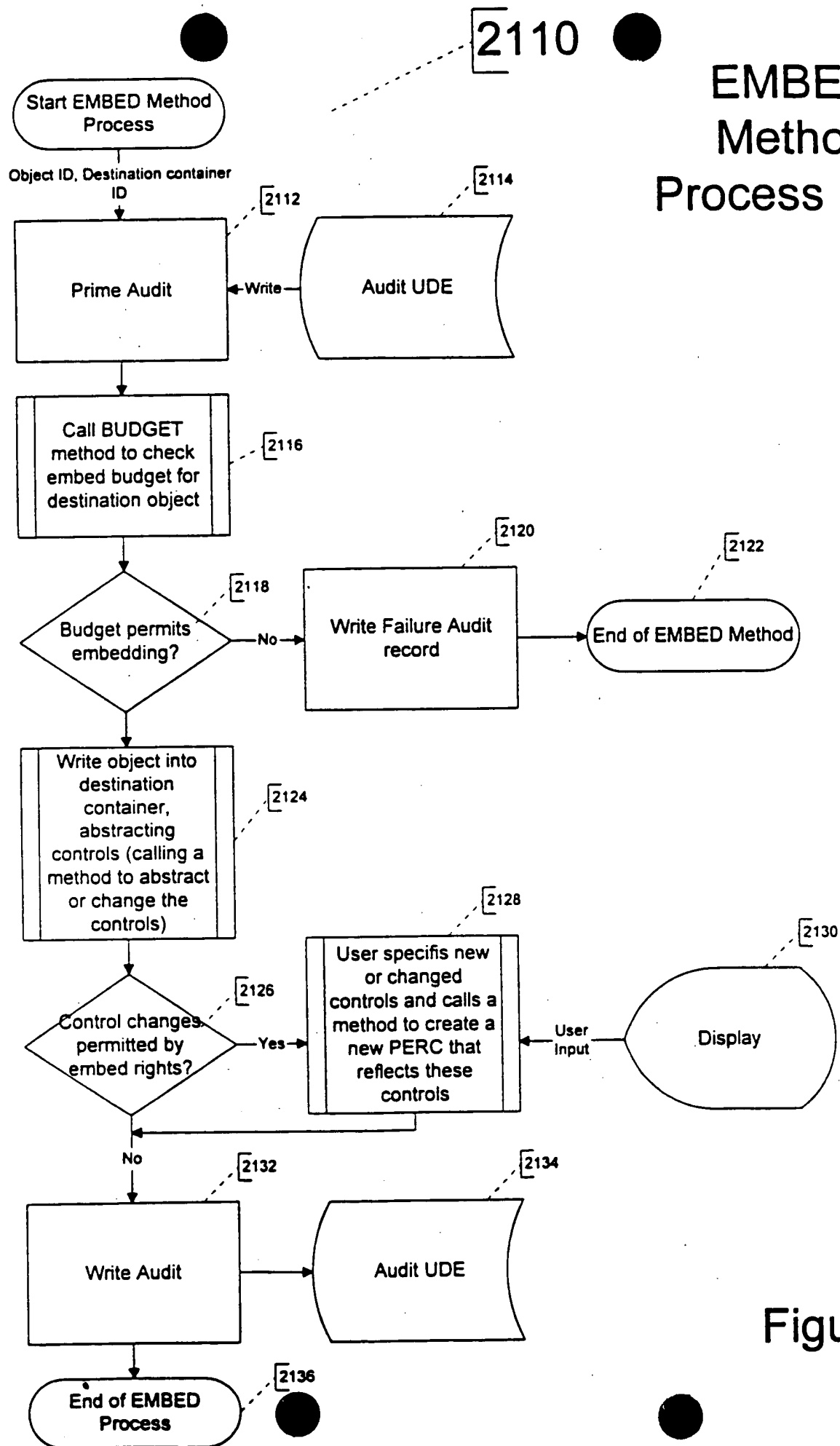


Figure 57b

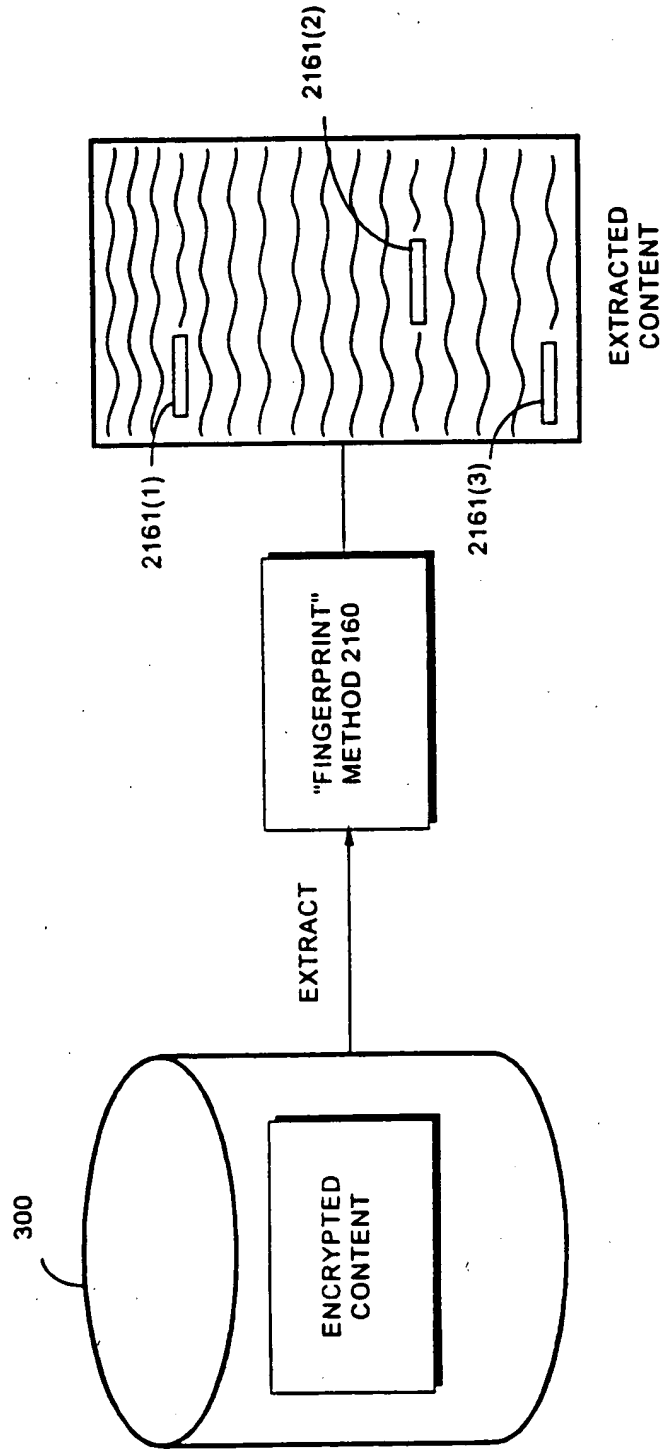
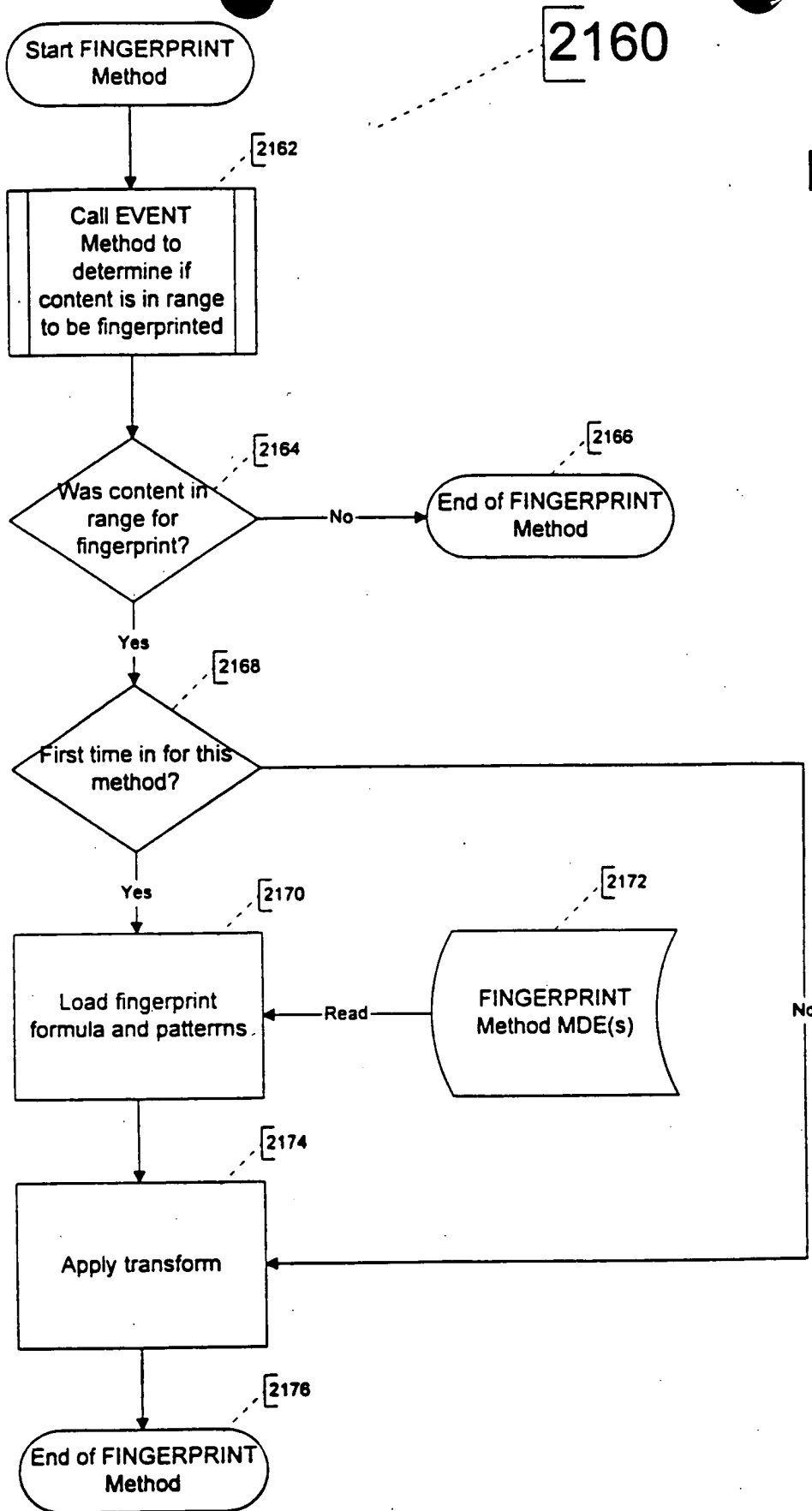


FIG. 58C



# FINGERPRINT Method Process Flow

Figure 58b

# PANIC Method Process Flow

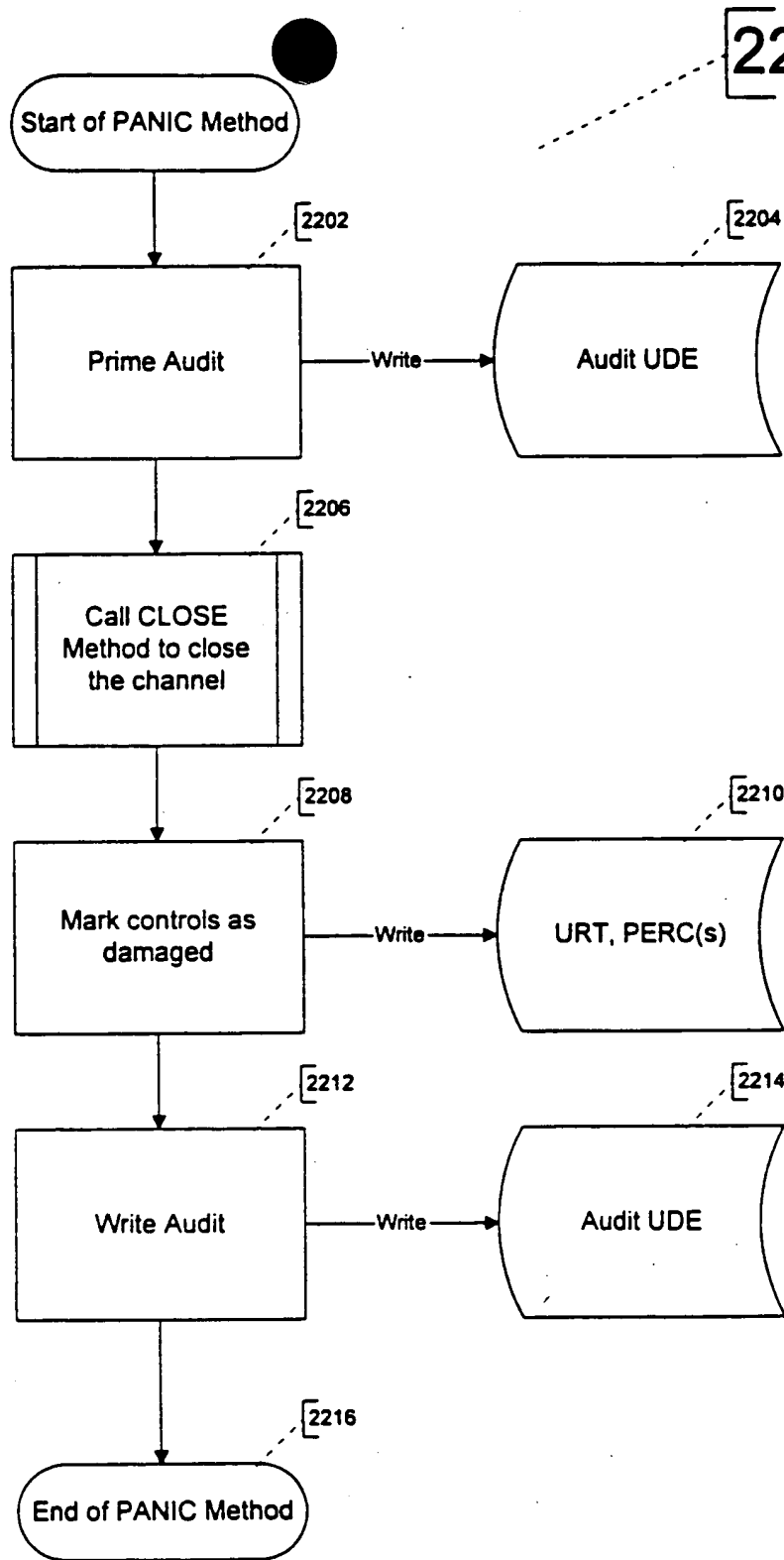


Figure 60



# DESTROY Method Process Flow

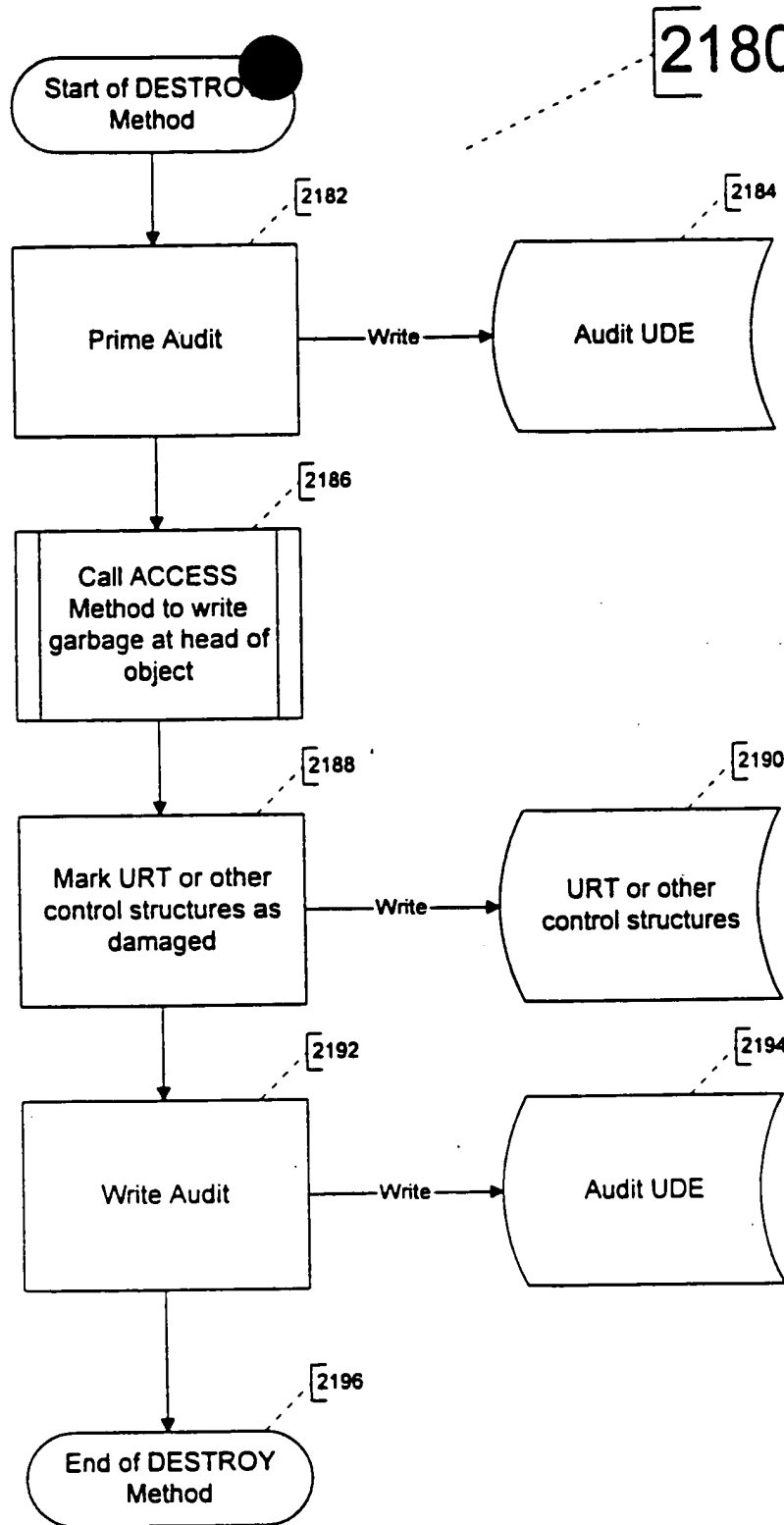
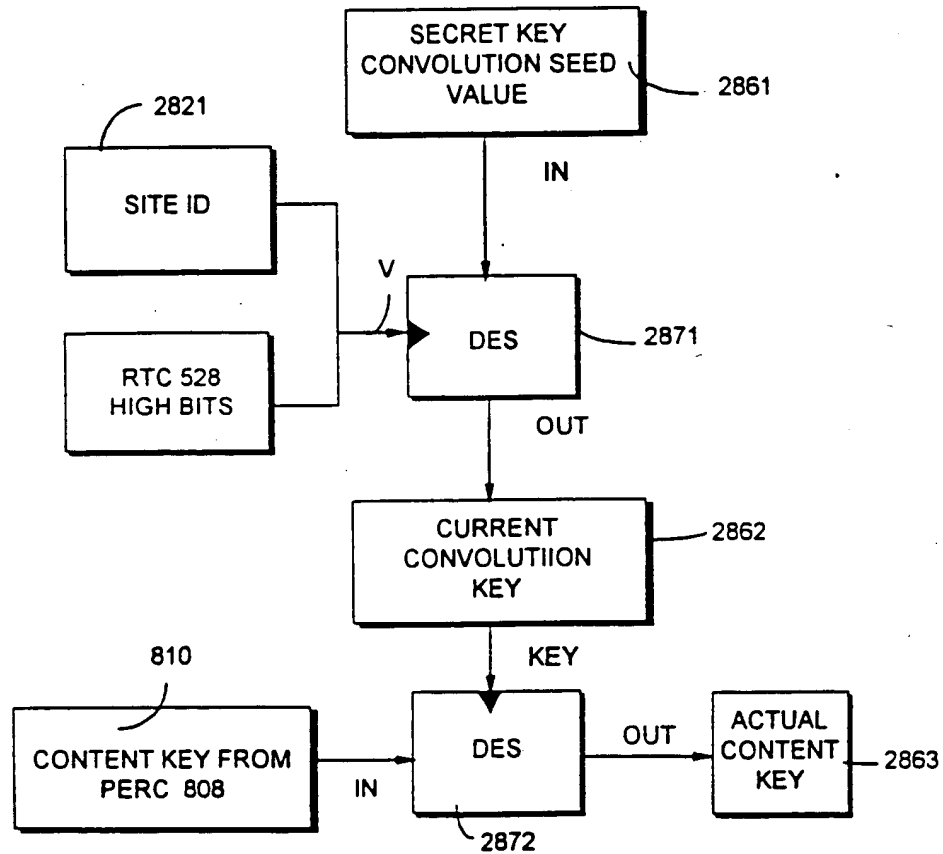


Figure 59

**FIG. 62**  
**KEY CONVOLUTION PROCESS**



# METER Method Use Process Flow

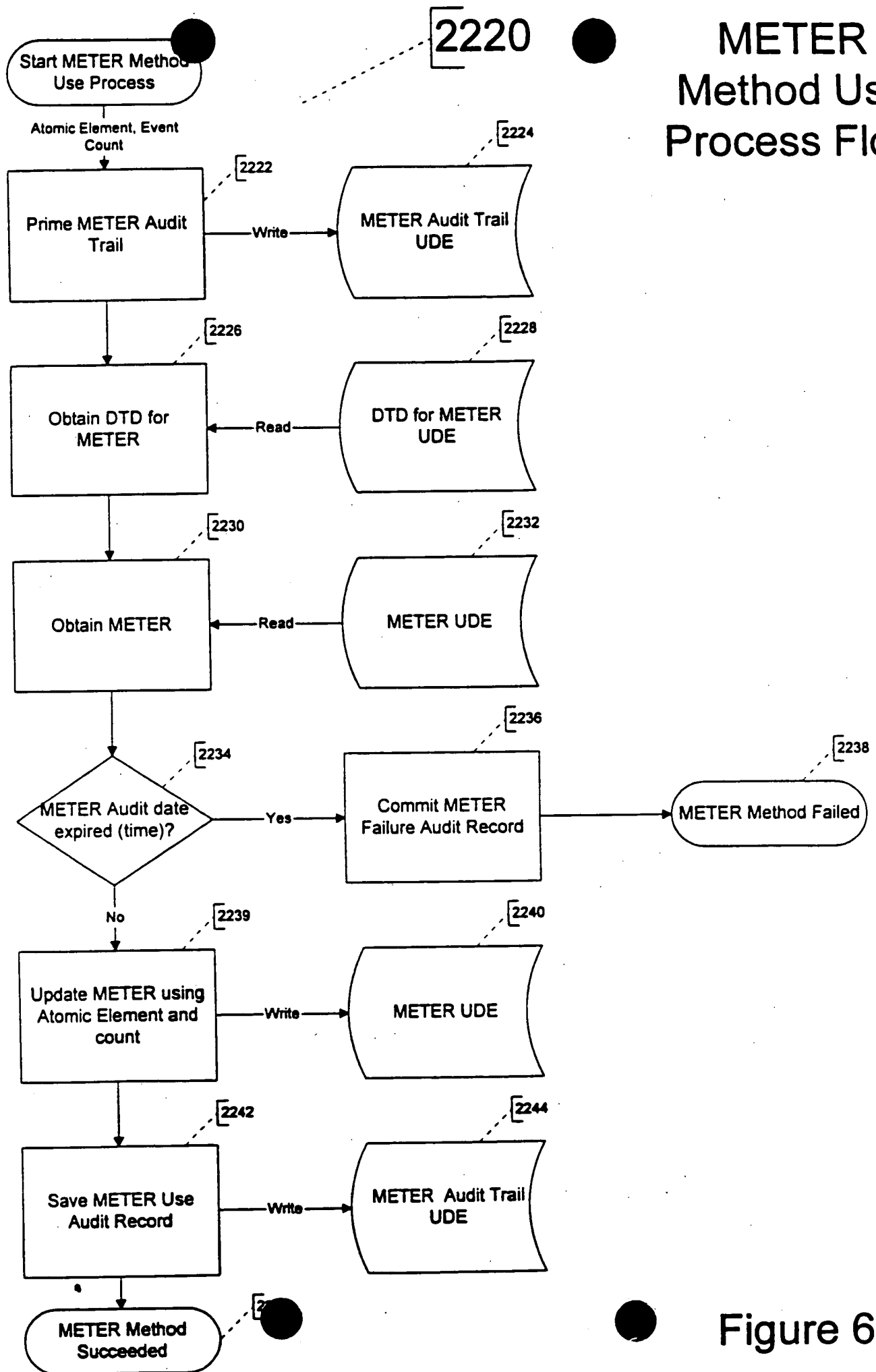
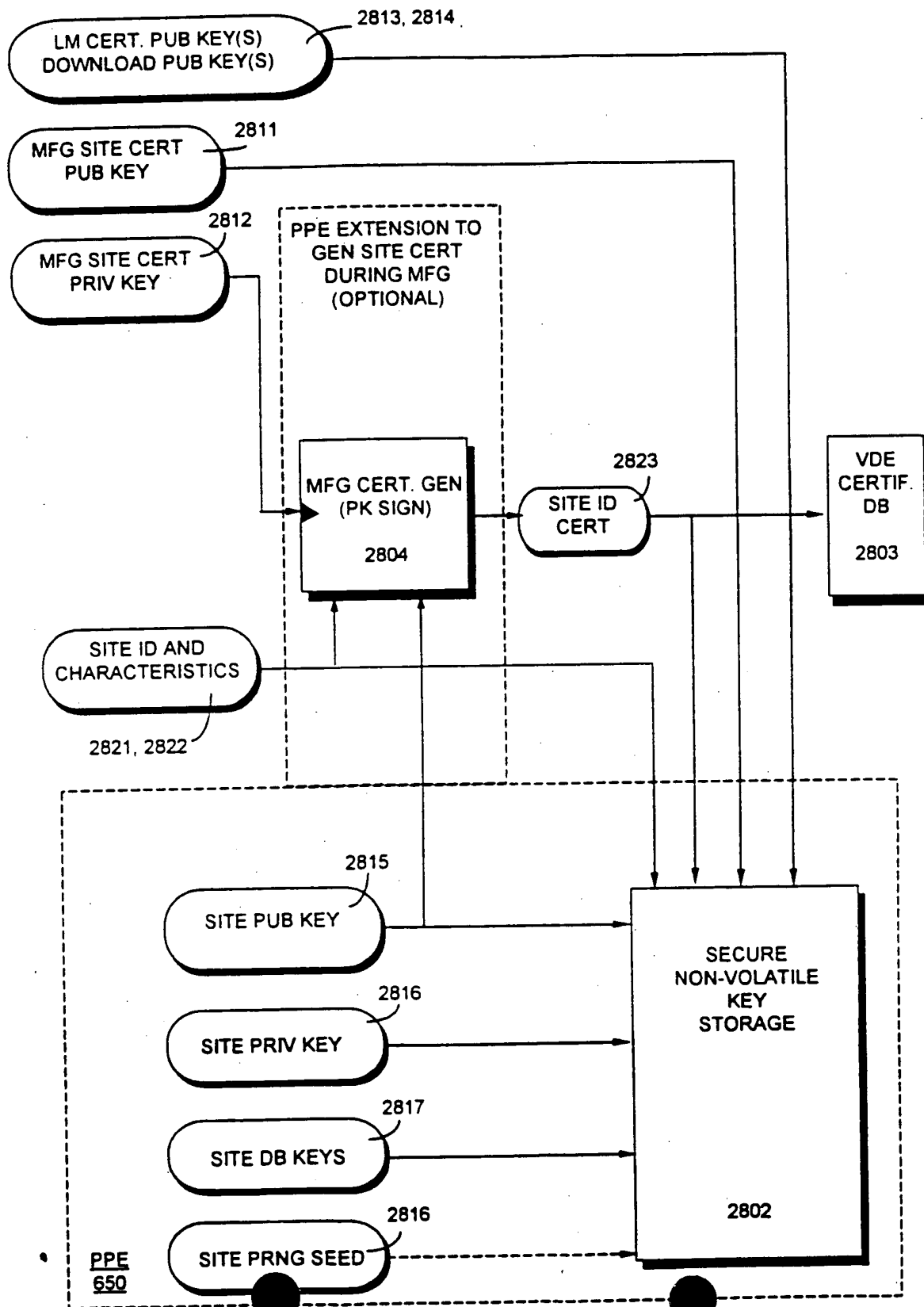


Figure 61

**FIG. 64** SPU KEY INITIALIZATION/INSTALLATION



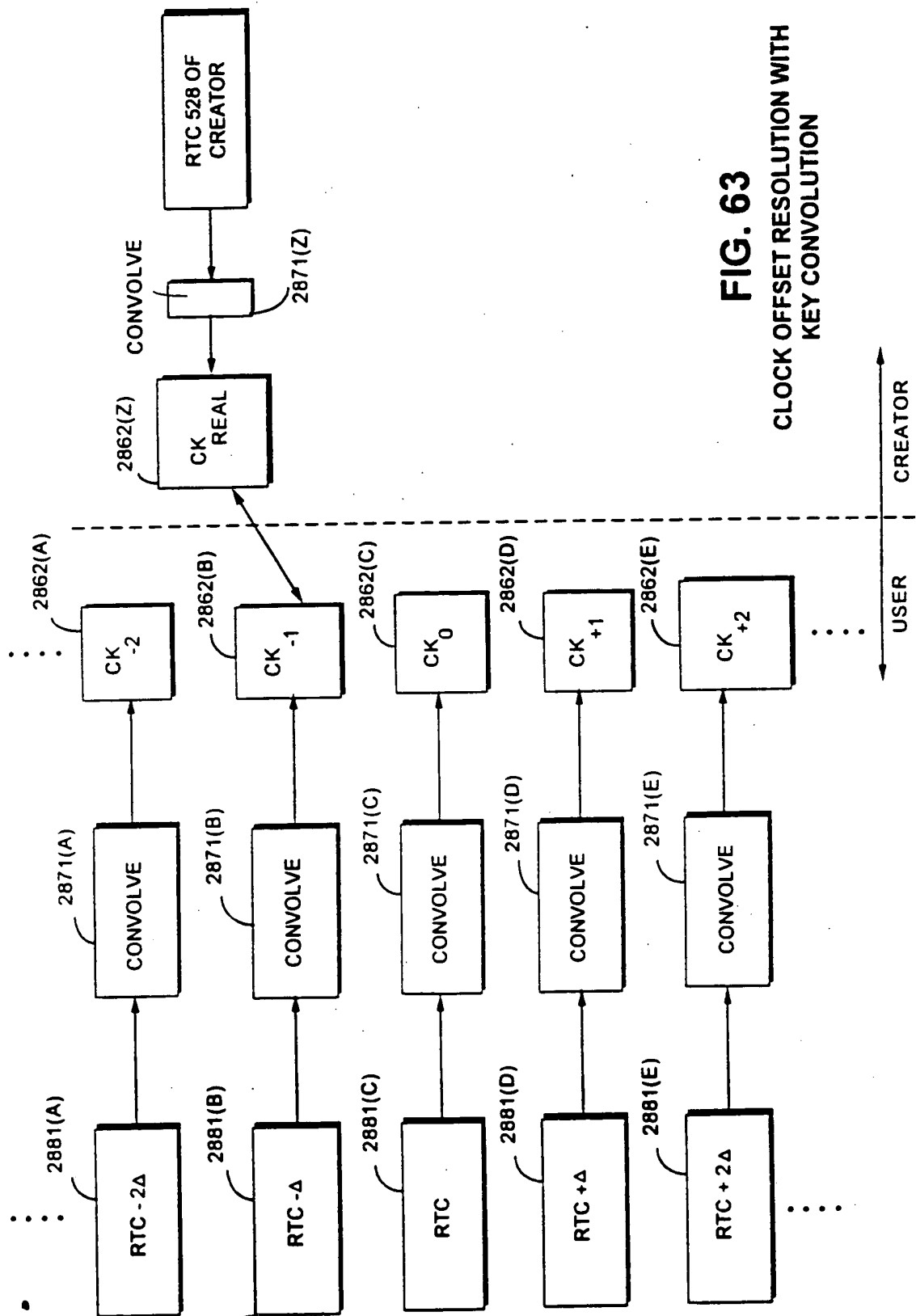
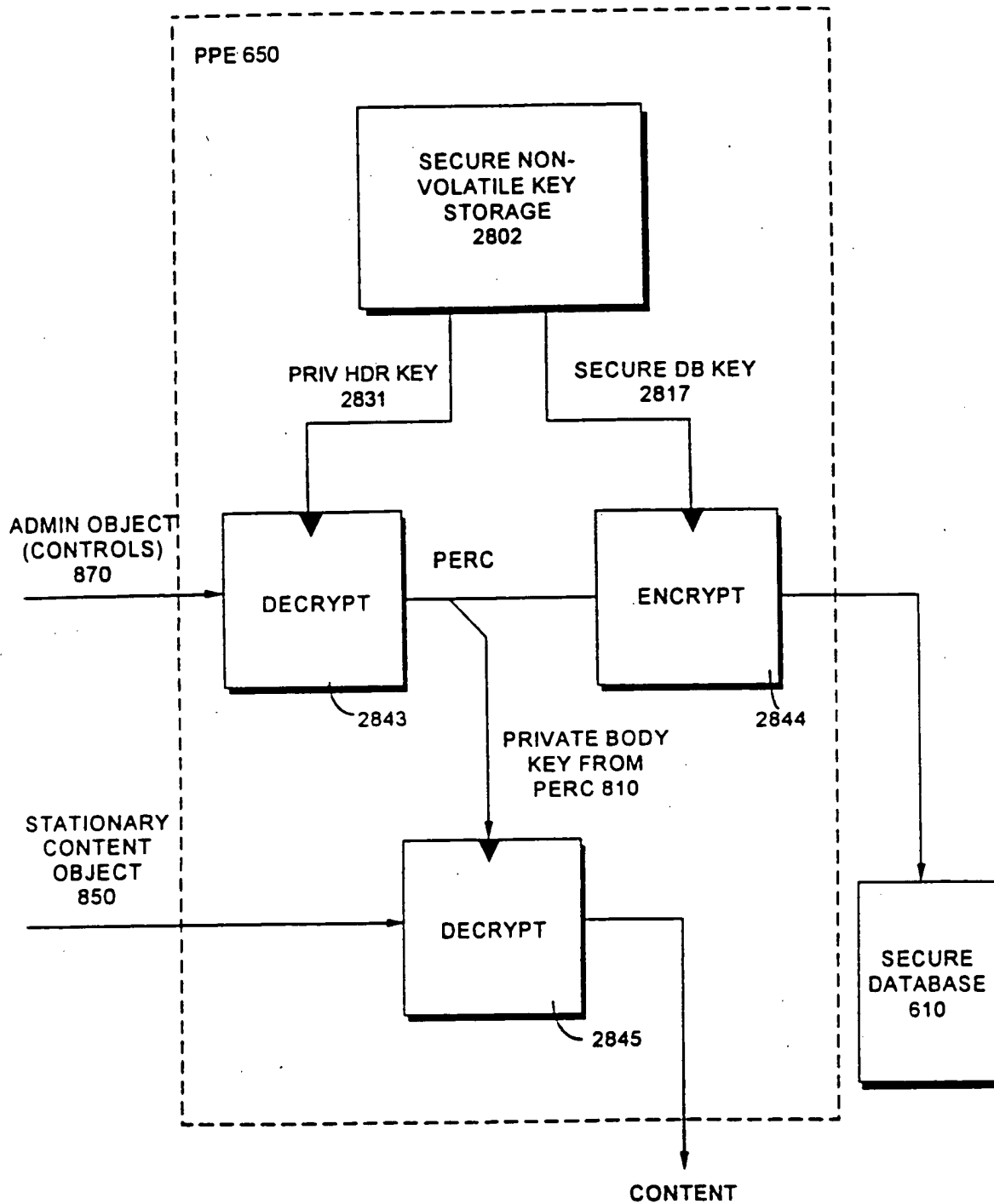


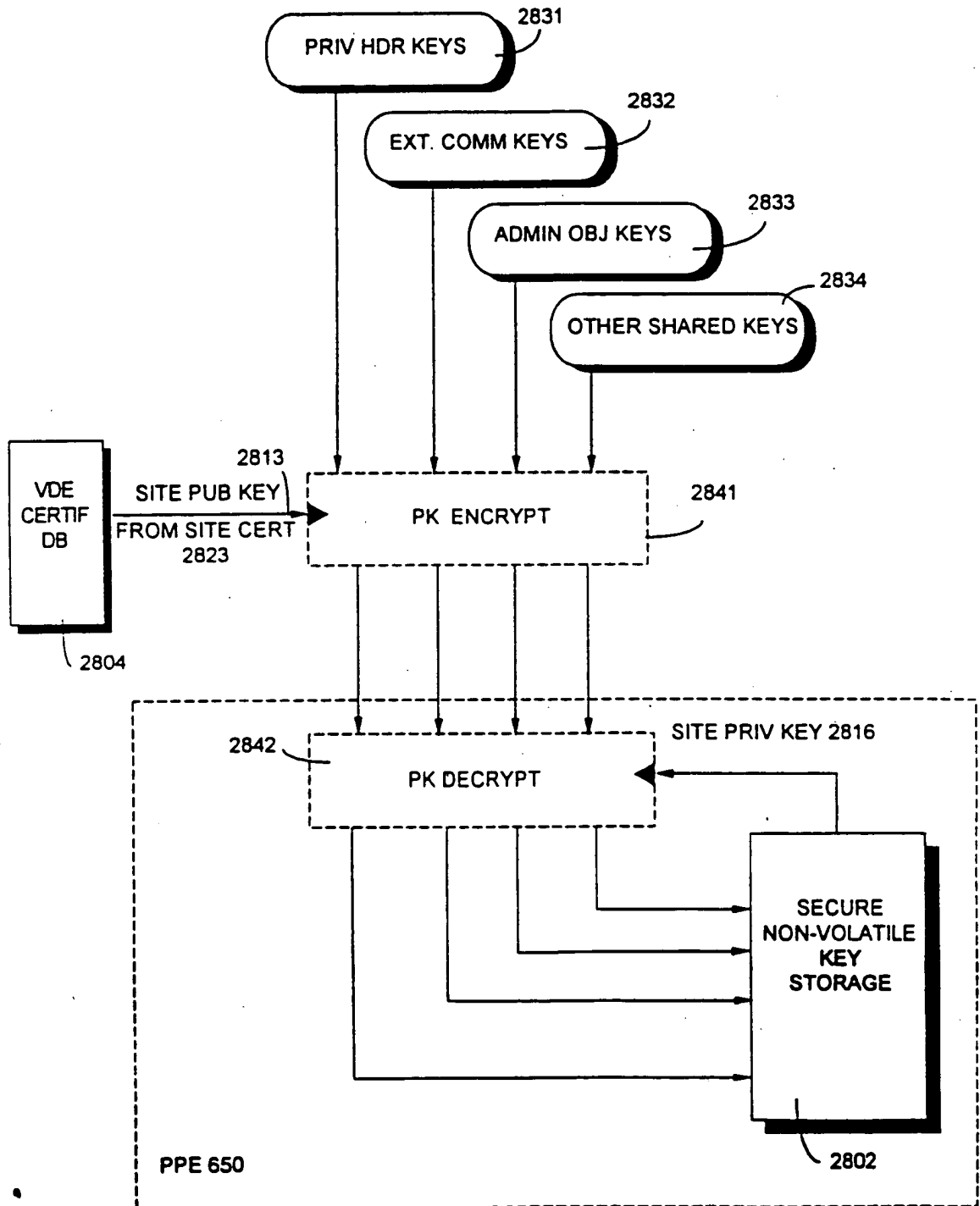
FIG. 63

CLOCK OFFSET RESOLUTION WITH  
KEY CONVOLUTION

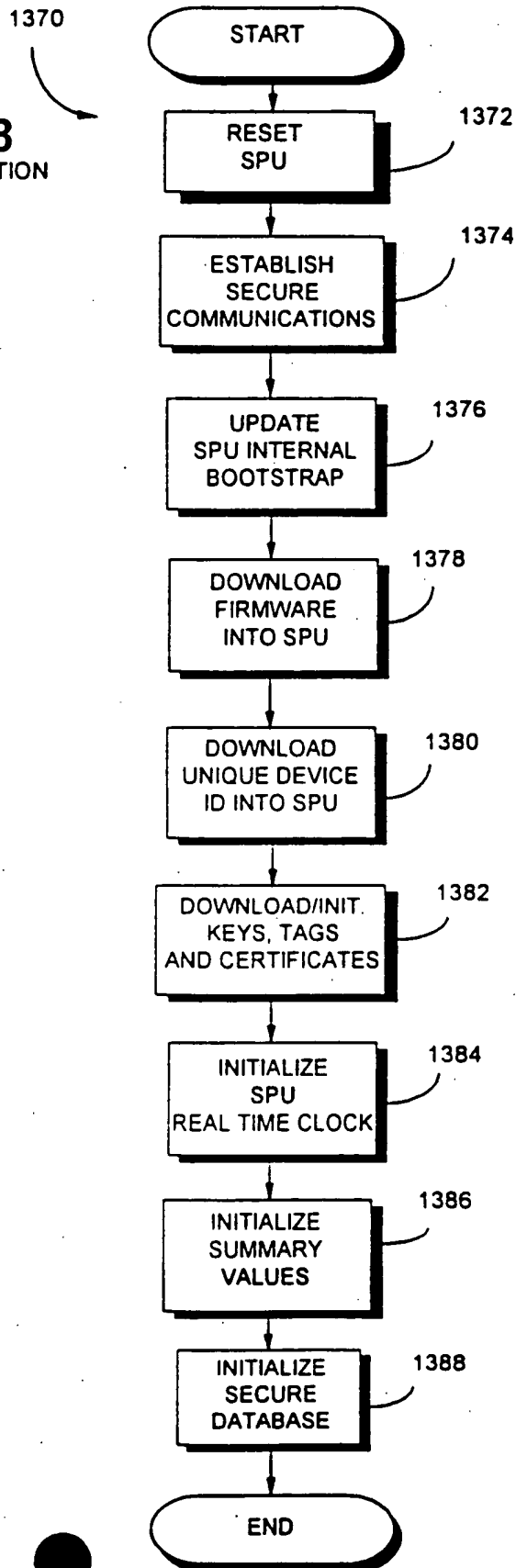


**FIG. 66** STATIONARY OBJECT DECRYPTION

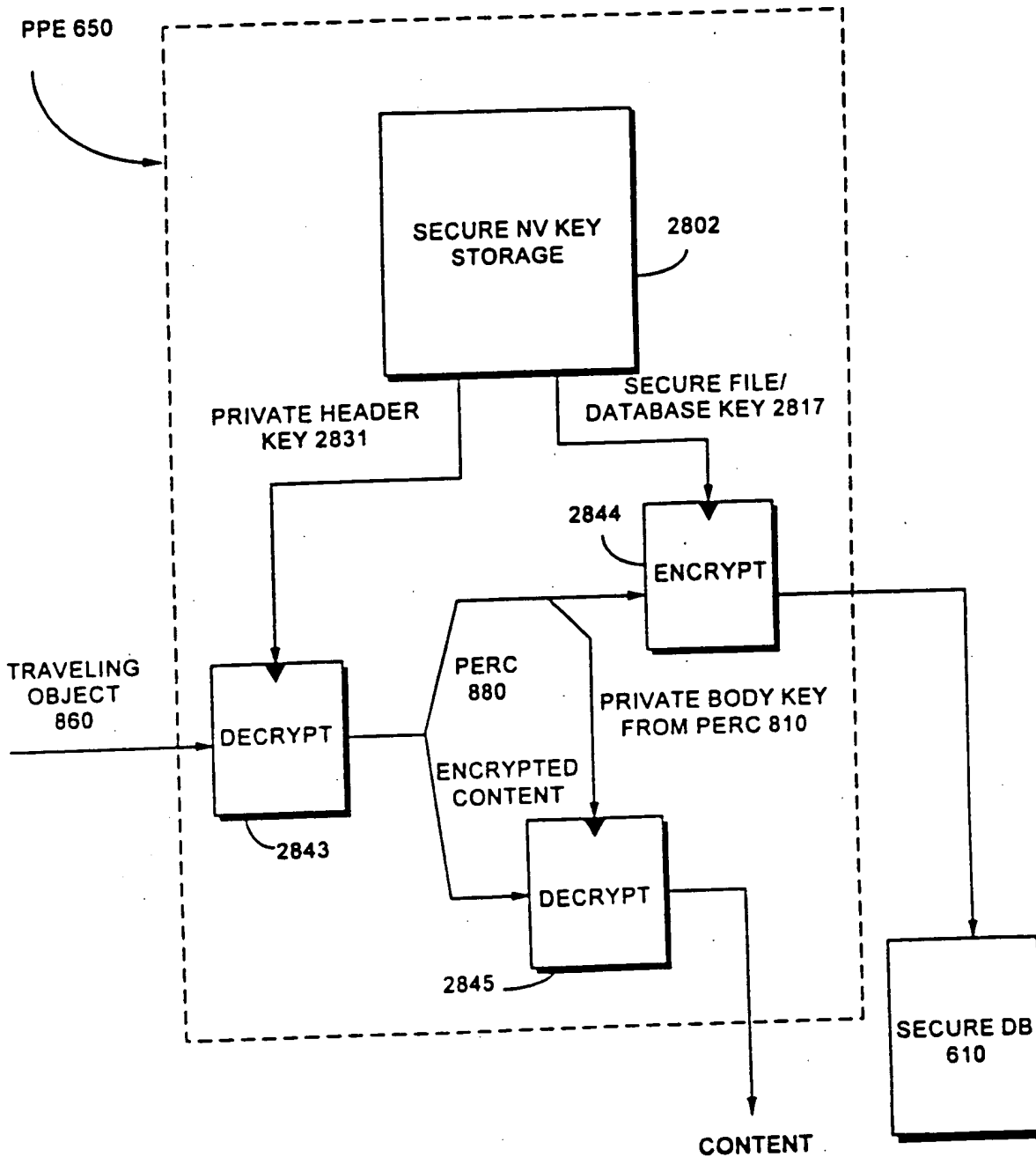
**FIG. 65** KEY INSTALLATION & UPDATE



**FIG. 68**  
SPU INITIALIZATION







**FIG. 67** TRAVELING OBJECT DECRYPTION

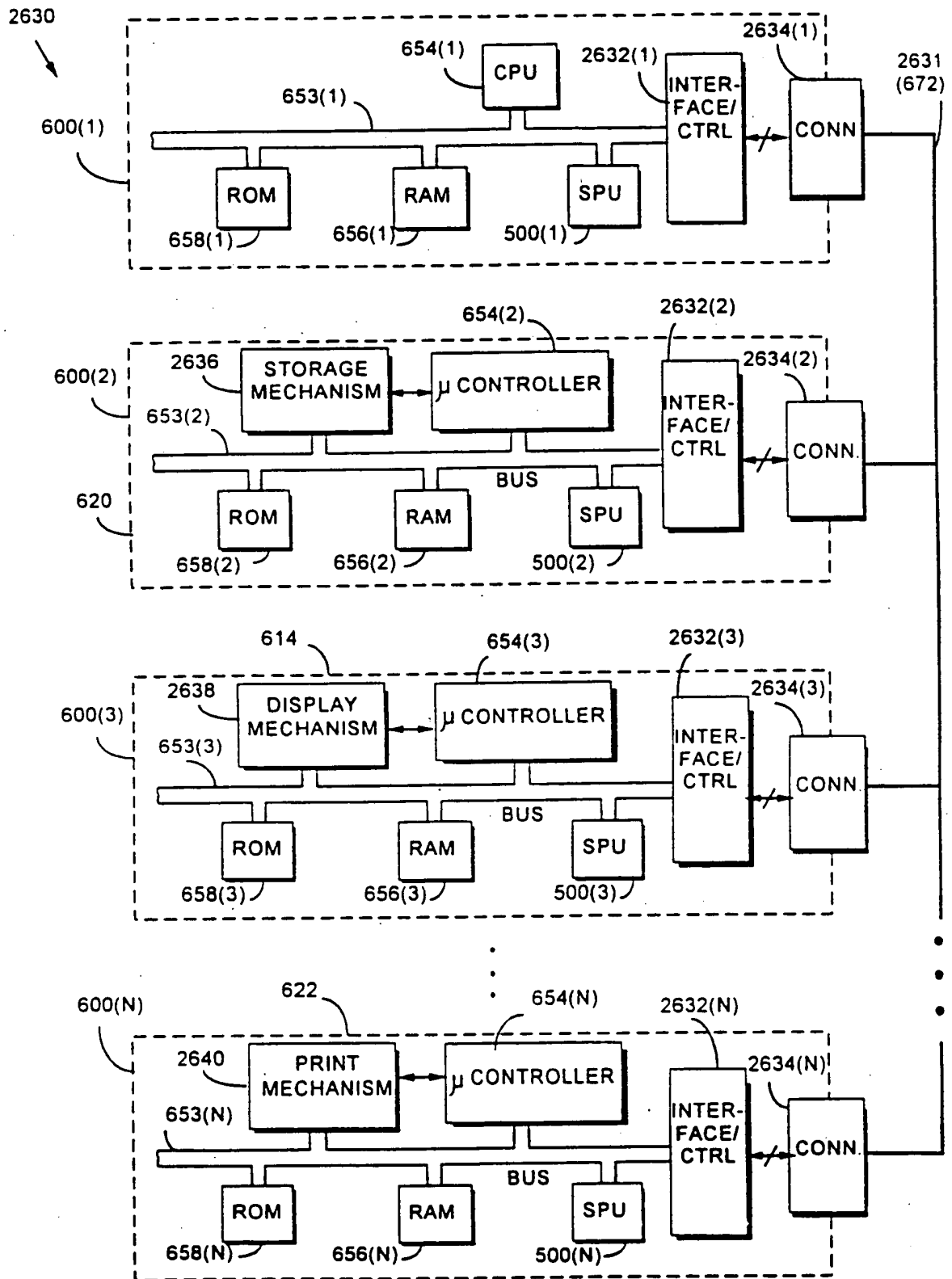
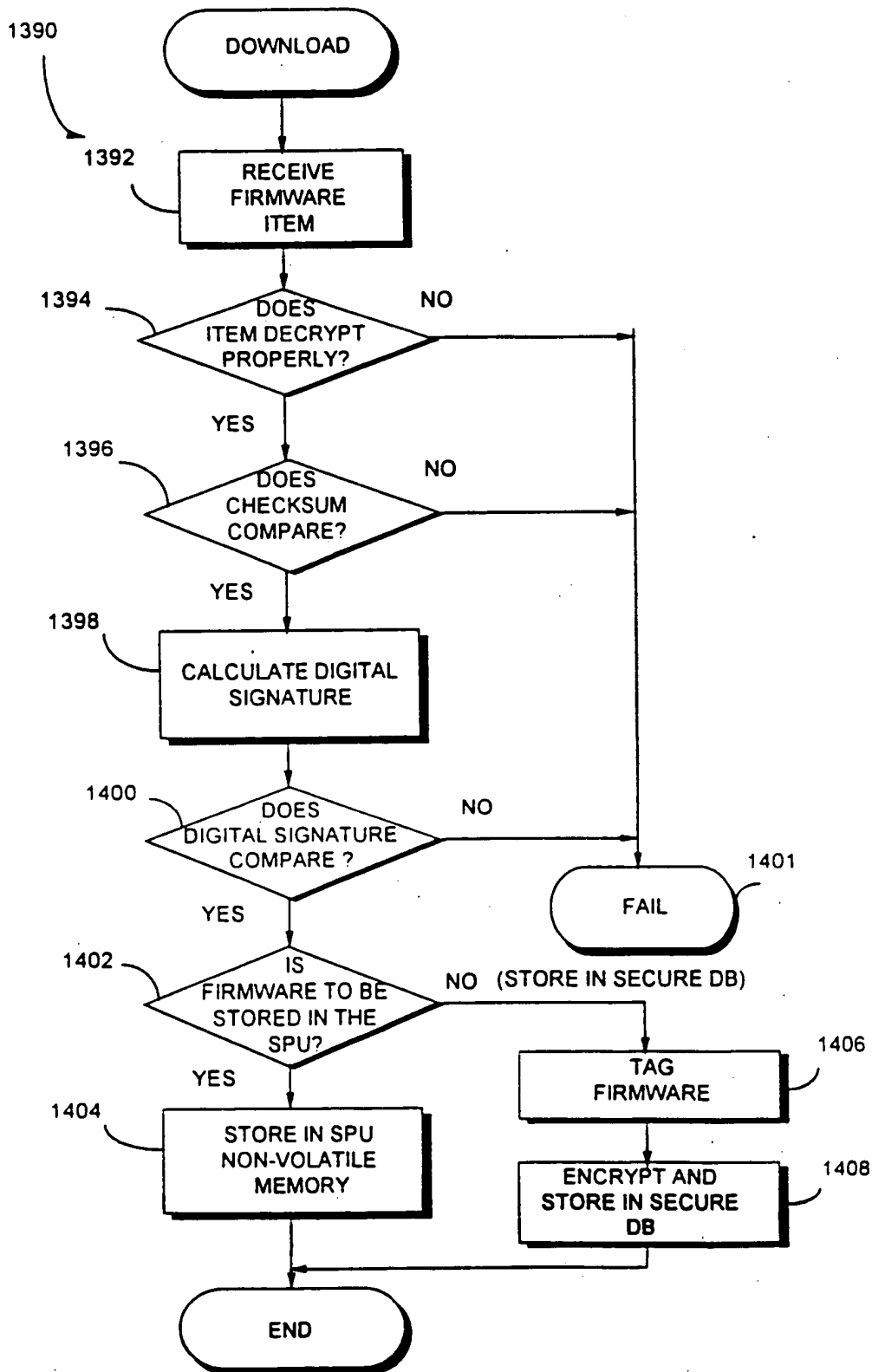


FIG. 70



**FIG. 69**

SPU FIRMWARE  
DOWNLOAD

LOG IN USER INTERFACE

182

A login interface window with a title bar. It contains two input fields: 'USER NAME:' with the text 'SHEAR, V.' and 'PASSWORD:' with five asterisks. To the right of these fields are three buttons: 'LOGIN', 'CANCEL', and 'HELP'. At the bottom left, there is a checkbox labeled 'LOGIN AT STARTUP'.

FIG. 72A

FIG. 72B

A dialog box titled 'YOU HAVE REQUESTED THESE PROPERTIES:'. It features a warning icon (triangle with an exclamation mark) on the left. Below the title, the text 'LOONEY TUNES NEWS!' is displayed. To the right of this text are two buttons: 'APPROVE' and 'SUSPEND'. At the top right of the dialog is a 'CANCEL' button. At the bottom left is a button labeled 'PROPERTY INFO'. At the bottom center, it says 'Your Cost: \$7.50'. At the bottom right, it says 'MORE OPTIONS' followed by a question mark icon. Reference numerals 2660, 2662, and 2664 point to the 'CANCEL', 'APPROVE', and 'MORE OPTIONS' elements respectively.

FIG. 71

PORTABLE APPLIANCE

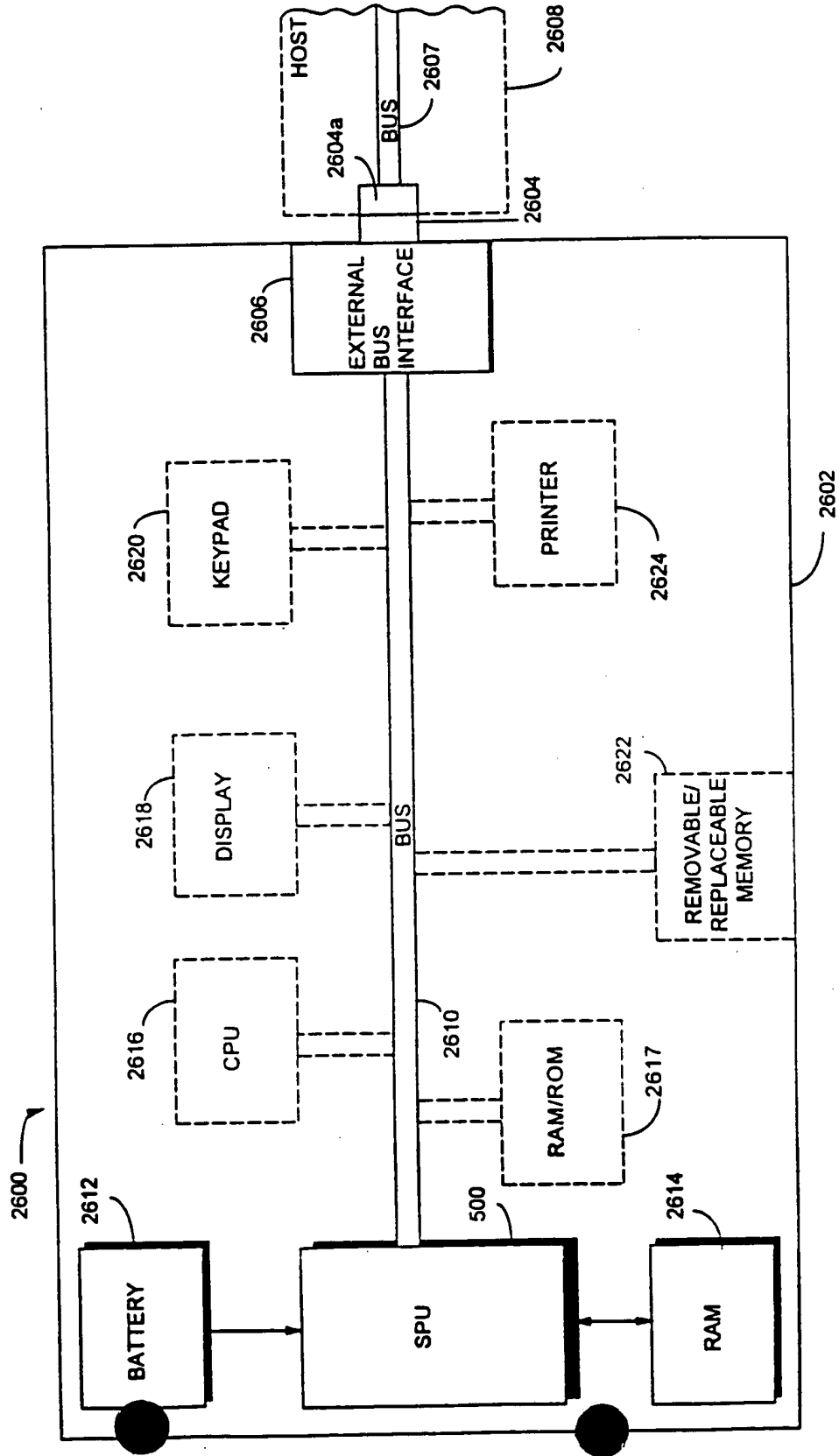



FIG. 72D



**YOU HAVE REQUESTED THESE PROPERTIES:**

**LOONEY TUNE NEWS!**

**YOUR COST : \$7.50**

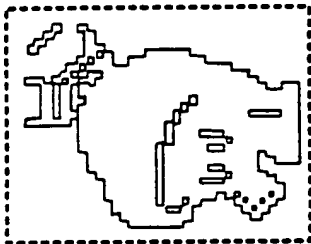
**PROPERTY INFO**

**More Options** ☒ **Show Thumbnail**

CANCEL

APPROVE

SUSPEND



PROPERTY:	SIZE:	PUBLISHER:	AMOUNT:	UNITS:	COST/UNIT:	TYPE:	USE?	LINKS:	HIST:
CHUCK JONES BIOGRA...	256KB	WARNER NEW MEDIA	64	KBYTE	\$1.25	PREVIEW	✓		●
▼ BUGS BUNNY.JPE...	1MB	WARNER NEW MEDIA	1	RECORD	\$5.00	DISPLAY	✓		●
BUGS BUNNY.JPEG...	1MB	WARNER NEW MEDIA	10	RECORD	\$3.50	DISPLAY			●
BUGS BUNNY.JPEG...	1MB	WARNER NEW MEDIA	25	RECORD	\$2.50	DISPLAY			●
FRIZ FRELENG BIOGRA...	256KB	WARNER NEW MEDIA	120	SECTOR	\$5.00	PRINT			
TEX AVERY BIOGRAP...	256KB	WARNER NEW MEDIA	50	PERCENT	\$2.50	COPY			
► DUCKI RABBITI DU...	64MB	WARNER NEW MEDIA	7.0	MINUTE	\$7.50	COPY-PRO			
MEL BLANC BIOGRAPH...	256KB	WARNER NEW MEDIA	1	SPECIAL	\$25.25	INSTALL			
LOONEY TUNES DATAB...	600MB	WARNER NEW MEDIA	1	OBJECT	\$2000.00	ALL			●

SET LIMITS...

SHOW BUDGETS

ACQUIRE BUDGET...

HISTORY...

TRANSFER...

PREFERENCES...

FEEDBACK...

HELP!

FIG. 72C

**SET LIMITS:**

SESSION DOLLAR LIMIT: \$

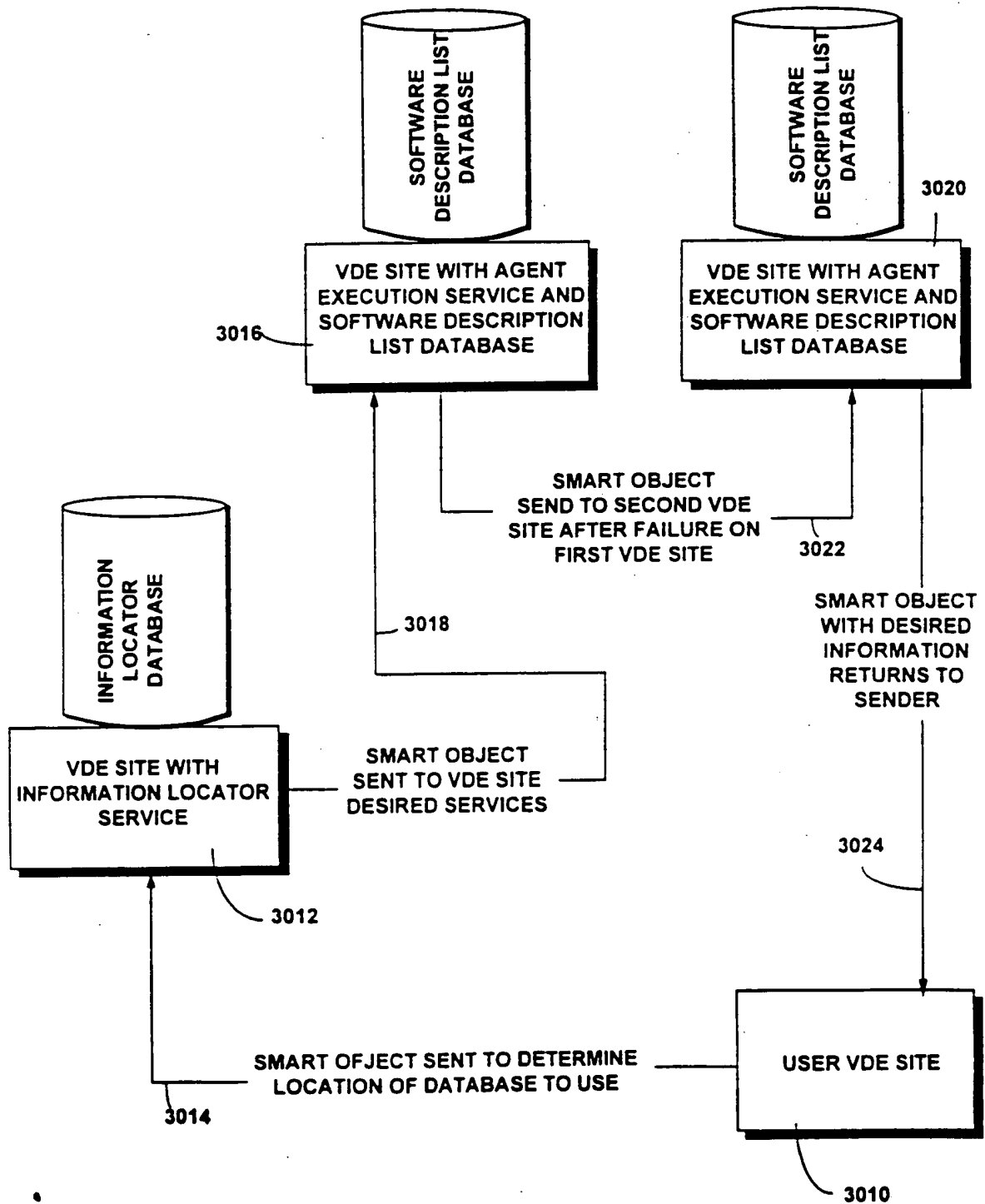
TRANSACTION DOLLAR LIMIT: \$

TIME LIMIT (IN MINUTES):

UNIT LIMIT:

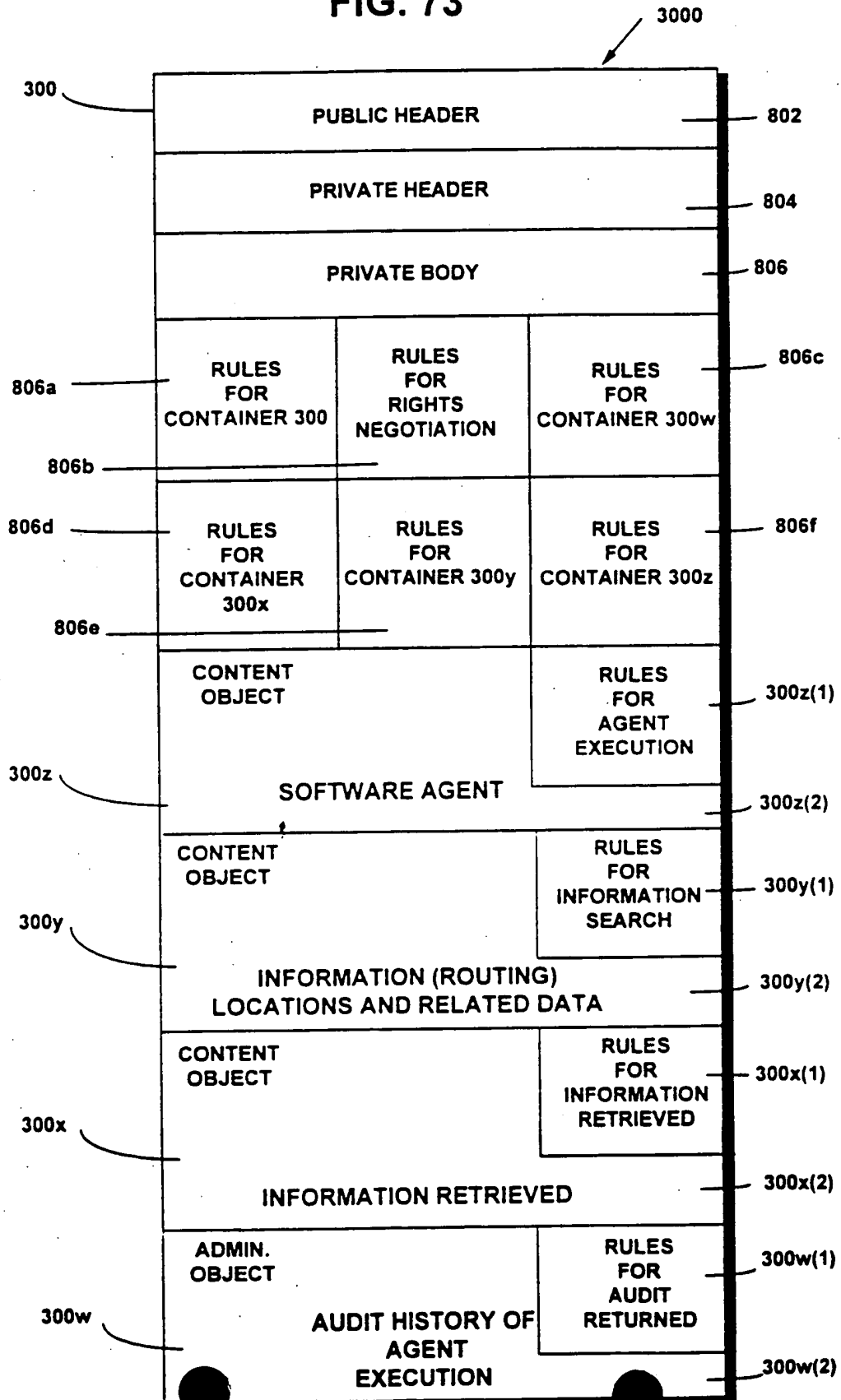
2666 2674

FIG. 74

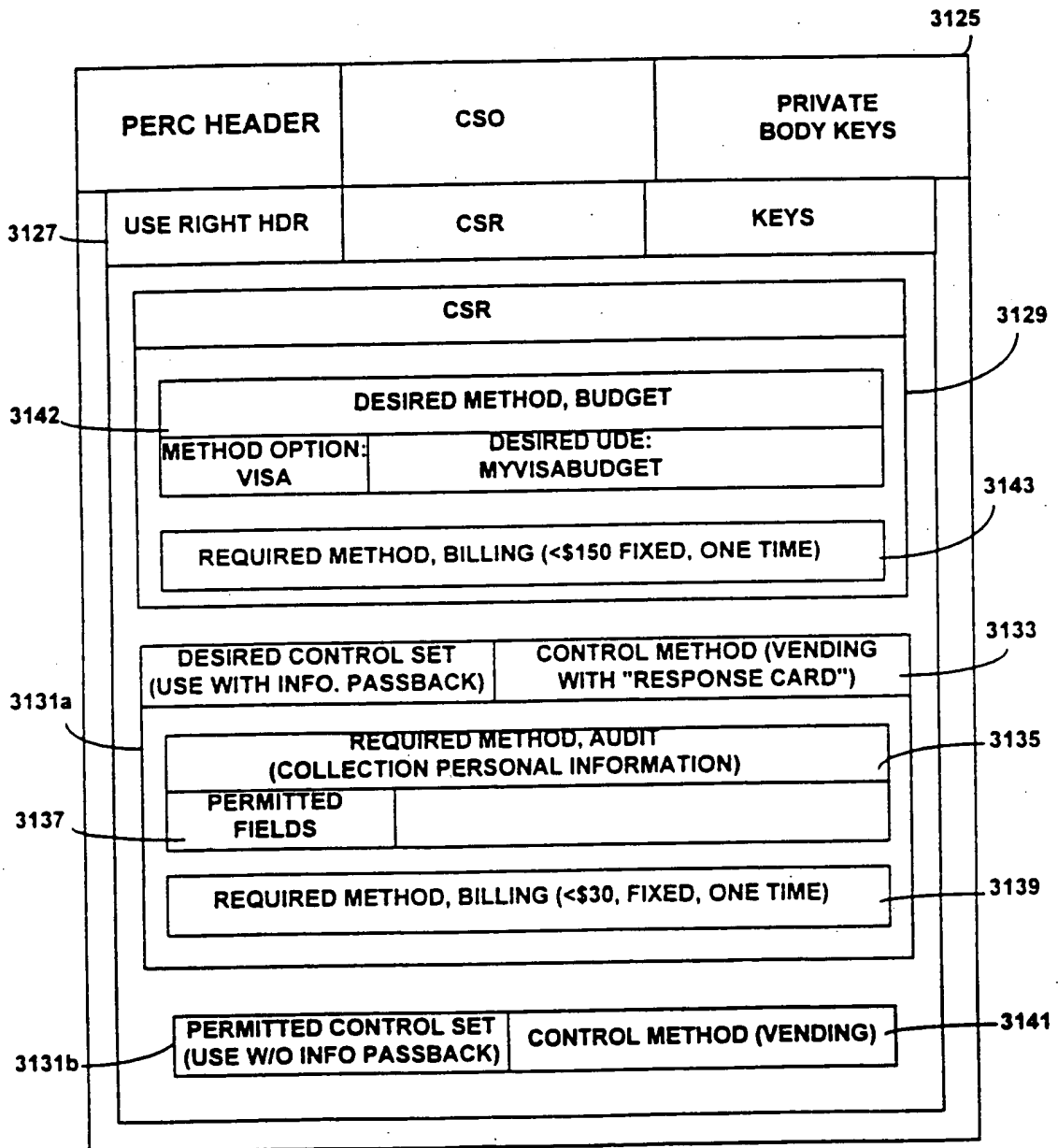




# FIG. 73



# FIG. 75B



# FIG. 75A

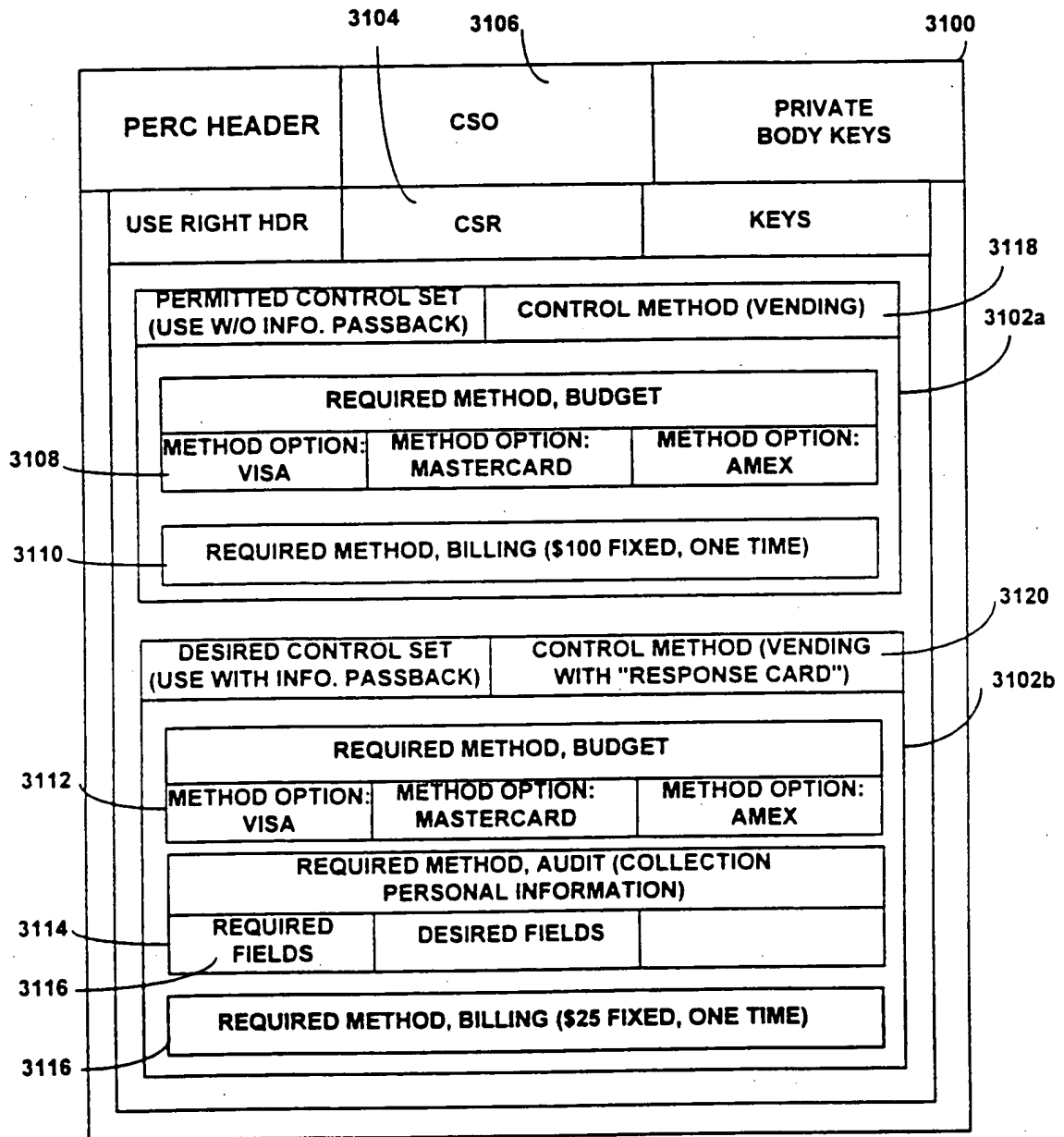


FIG. 75D

URT HEADER		CSO		DIGITAL SIGNATURE		3160
USE RIGHT HDR		CSR				
CONTROL SET(USE WITH INFO. PASSBACK)		CONTROL METHOD(VENDING WITH "RESPONSE CARD")				
REQUIRED METHOD, BUDGET						
METHOD OPTION: VISA		DESIRED UDE: MYVISABUDGET				
REQUIRED METHOD, AUDIT (COLLECTION PERSONAL INFORMATION)						
PERMITTED FIELDS						
REQUIRED METHOD, BILLING(\$25, FIXED, ONE TIME)						

3162

3164

3166

3170

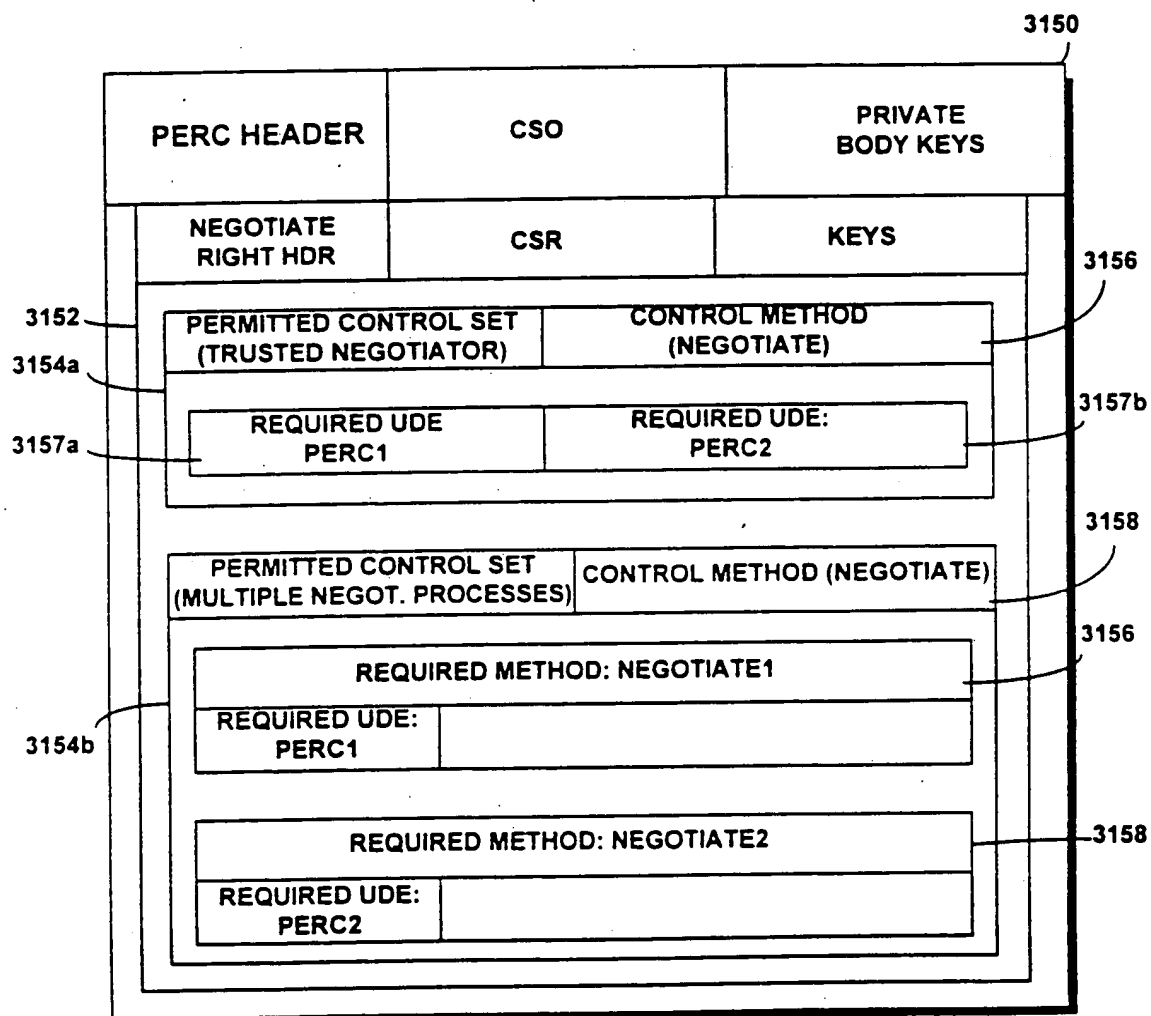
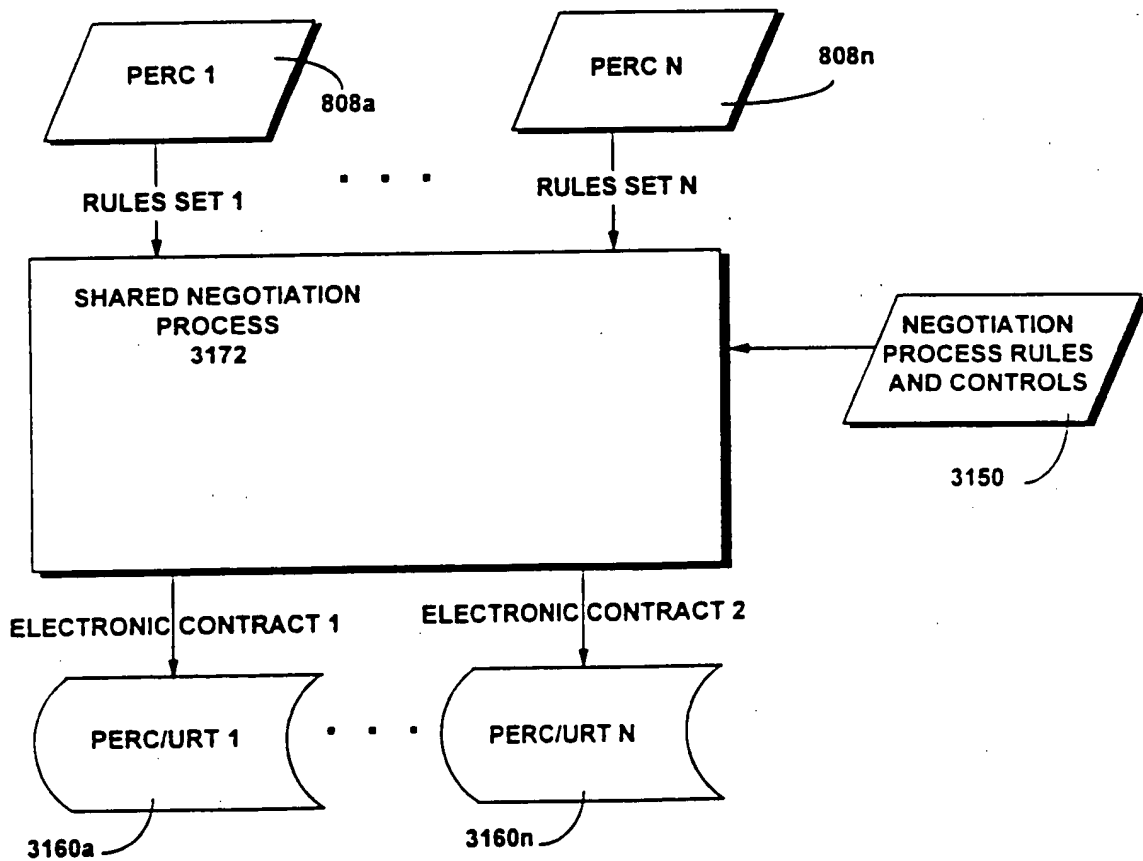
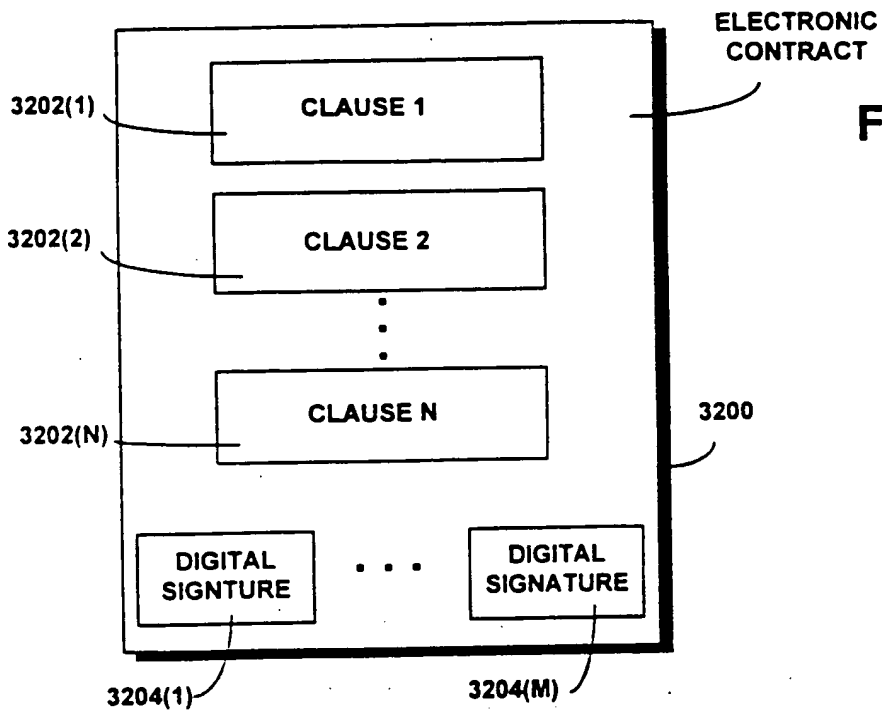
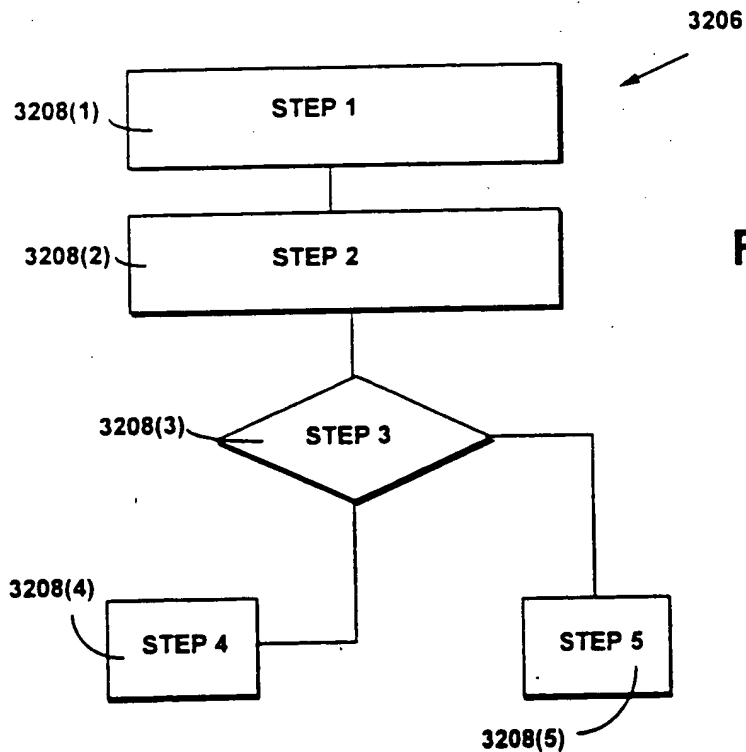
[illegible]

FIG. 76A





**FIG. 75E**



**FIG. 75F**

FIG. 77

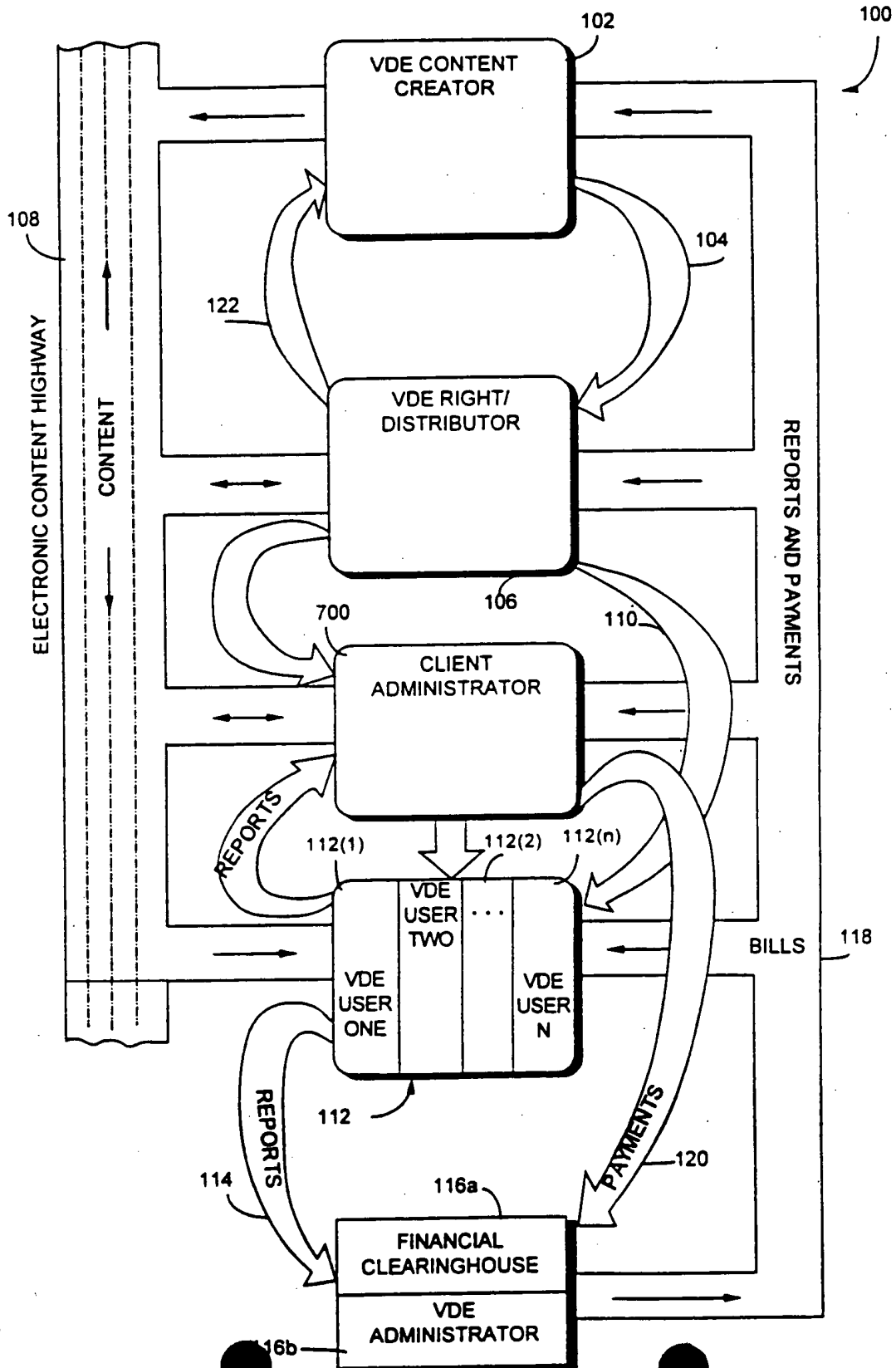
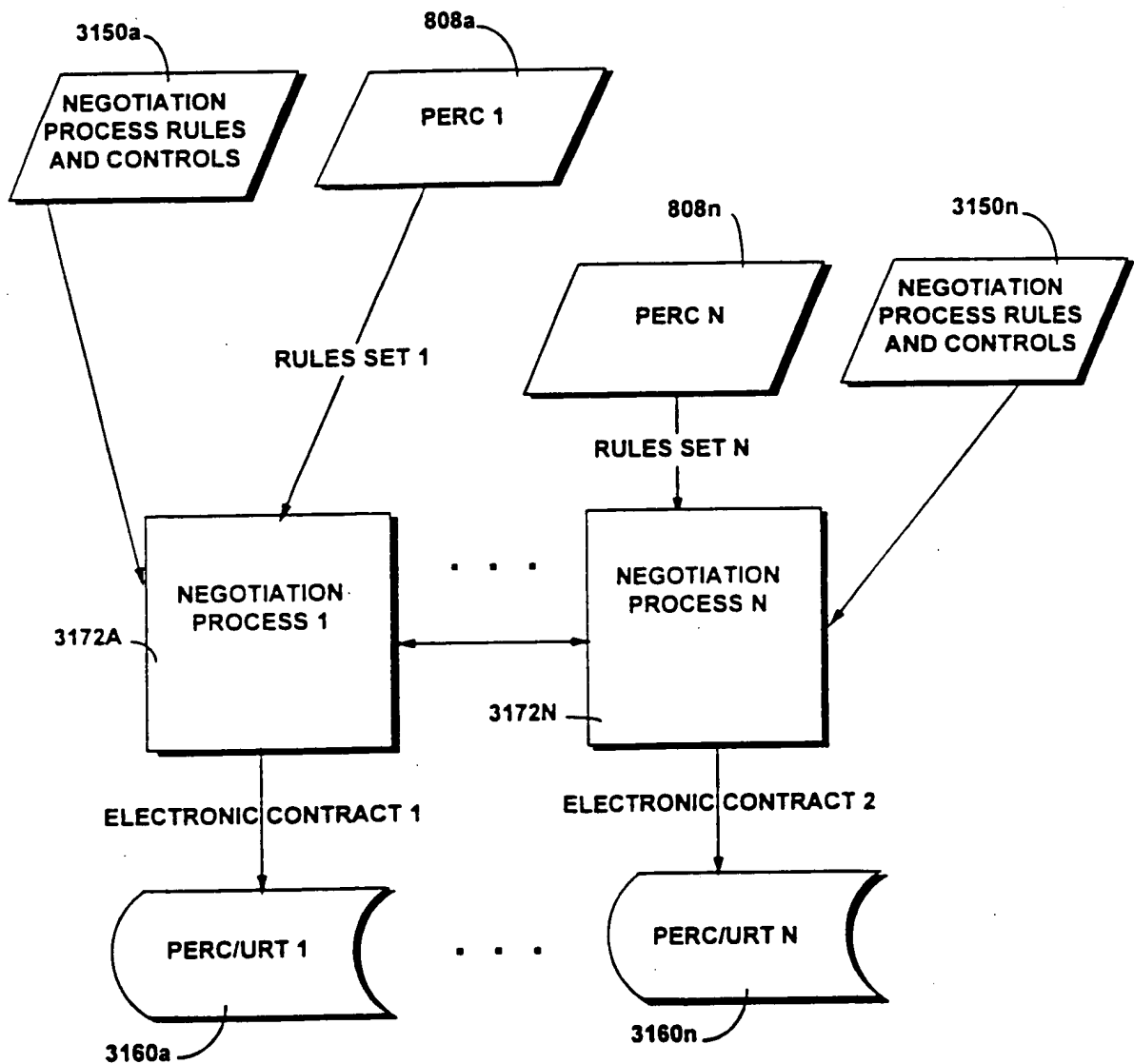




FIG. 76B



**FIG. 79**

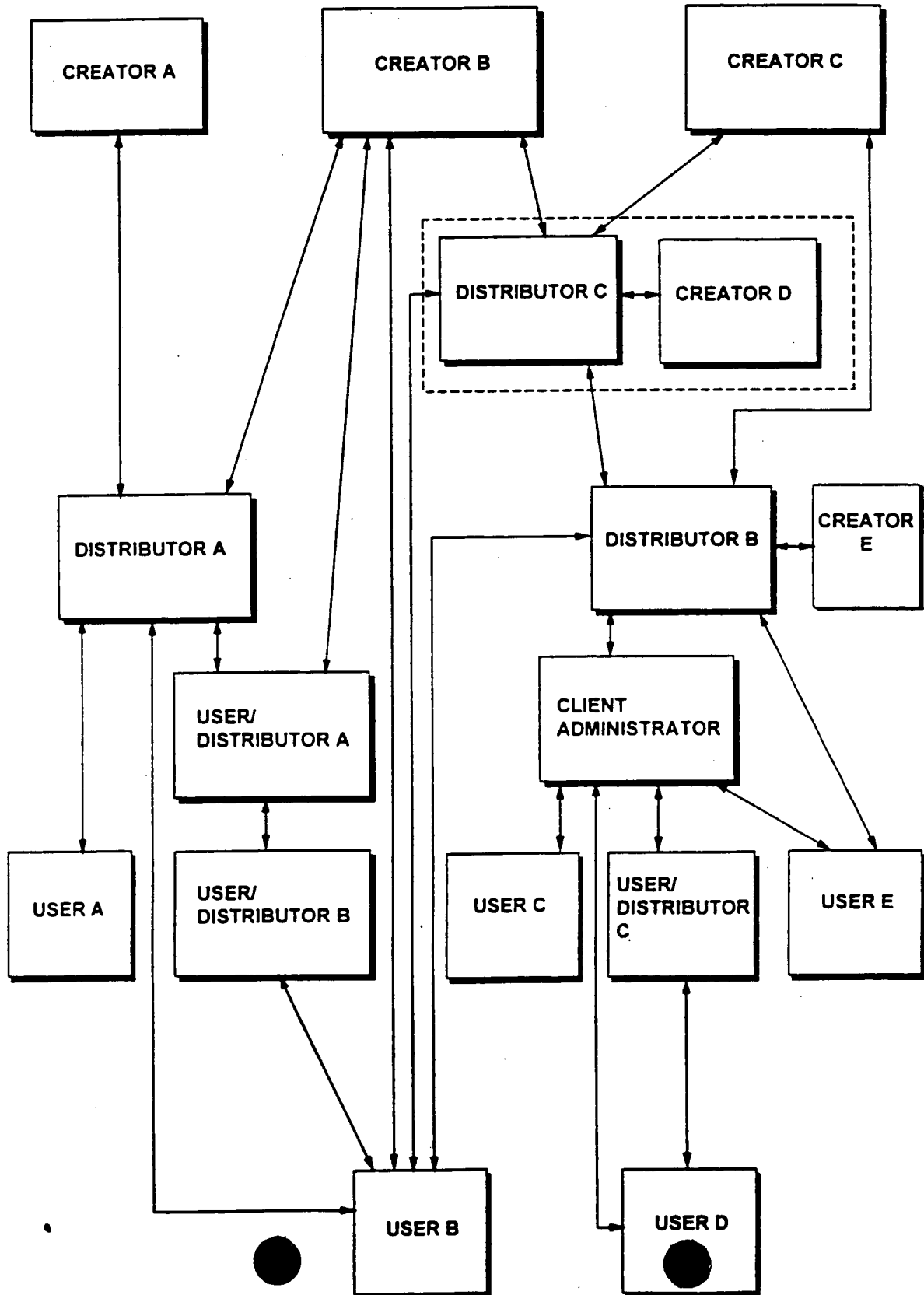


FIG. 79

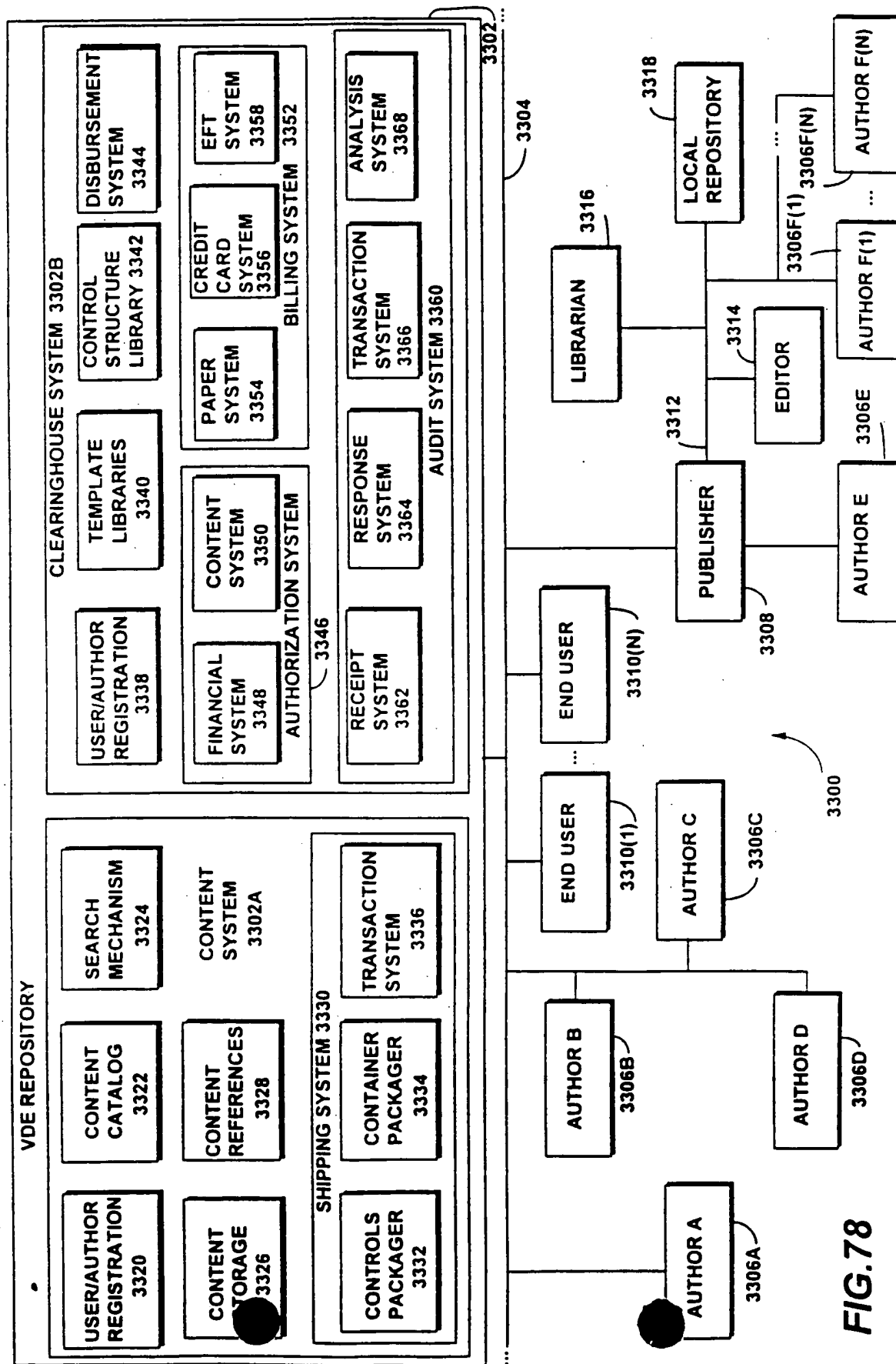
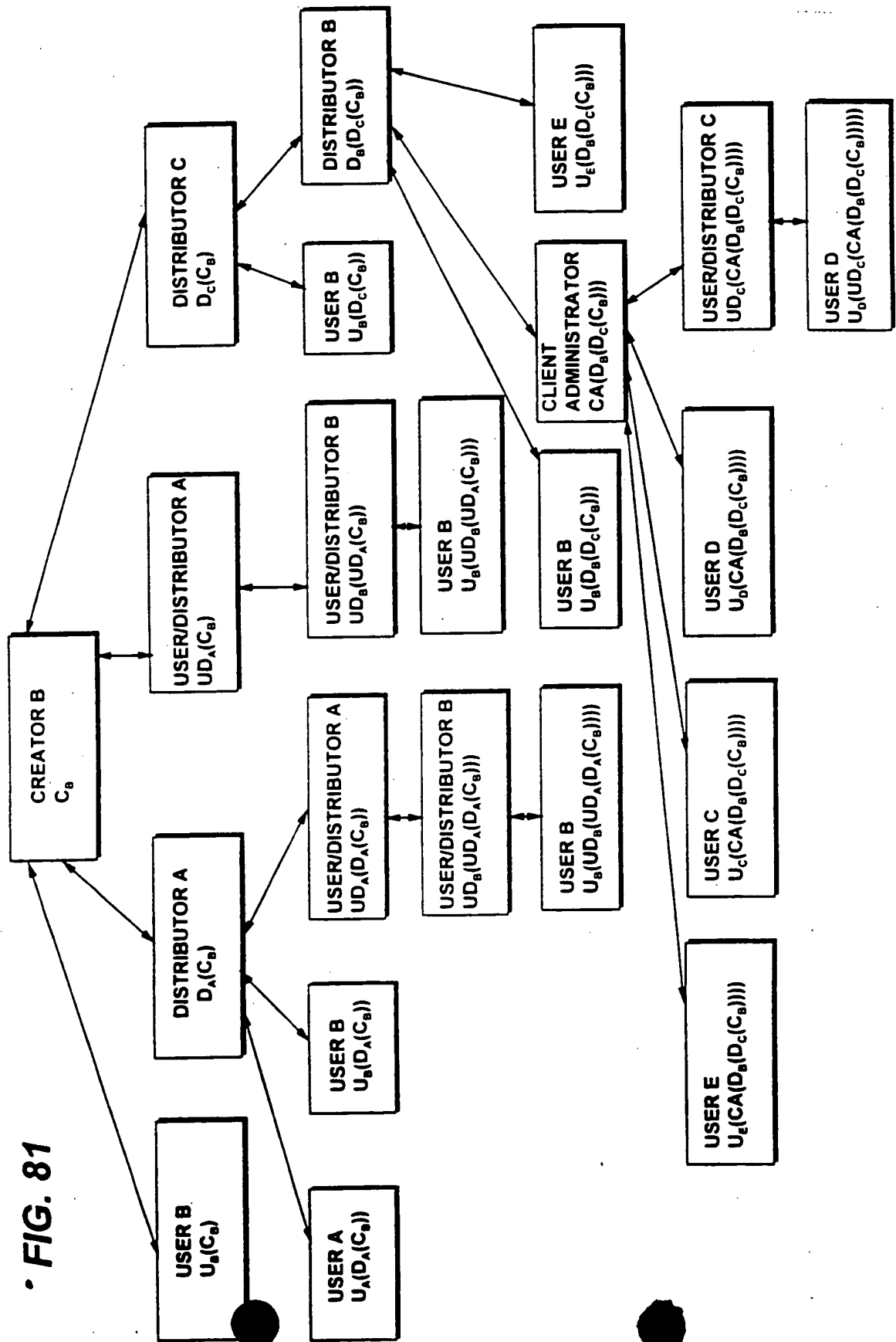
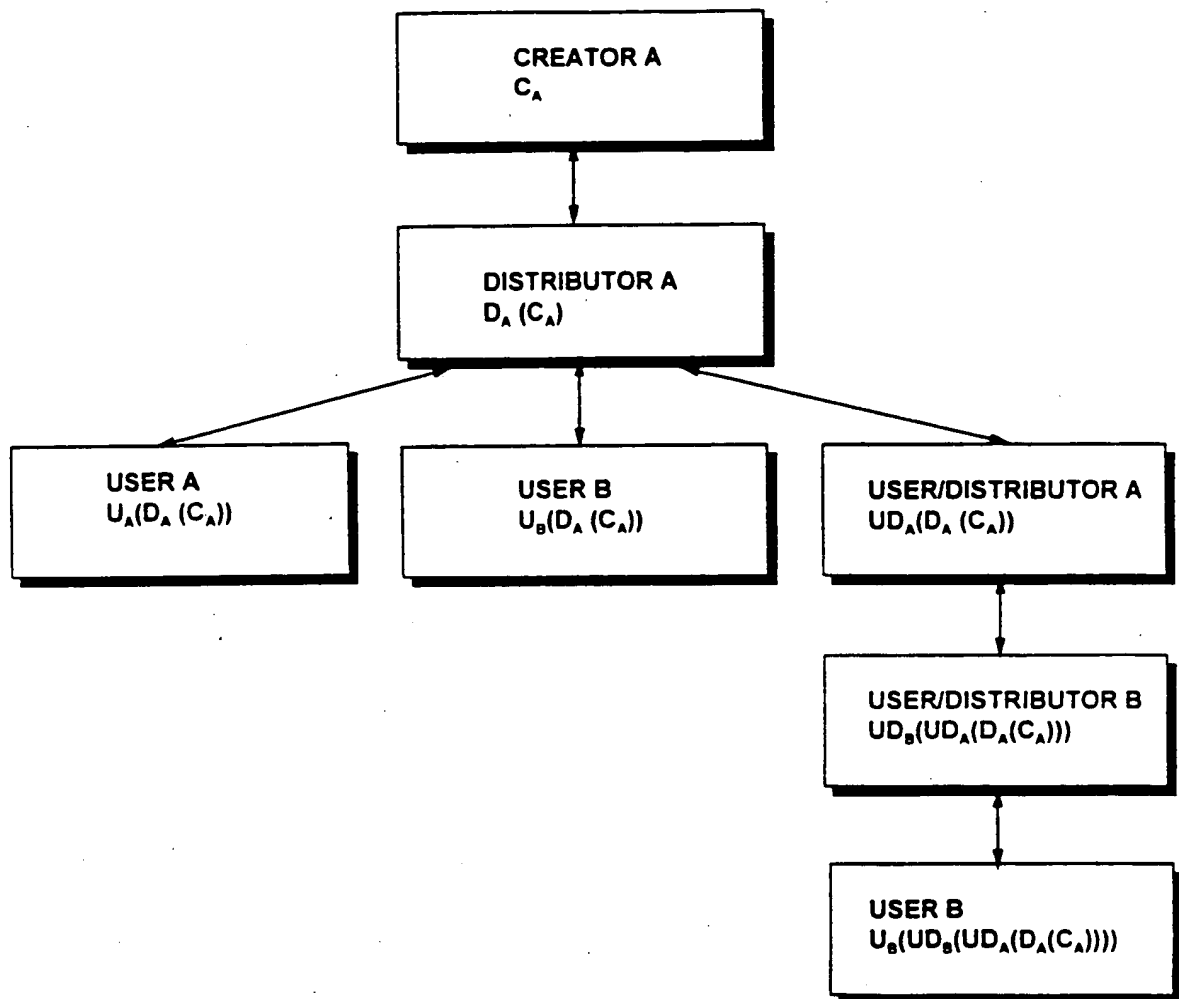


FIG.78

**FIG. 81**



**FIG. 80**



**FIG. 83**

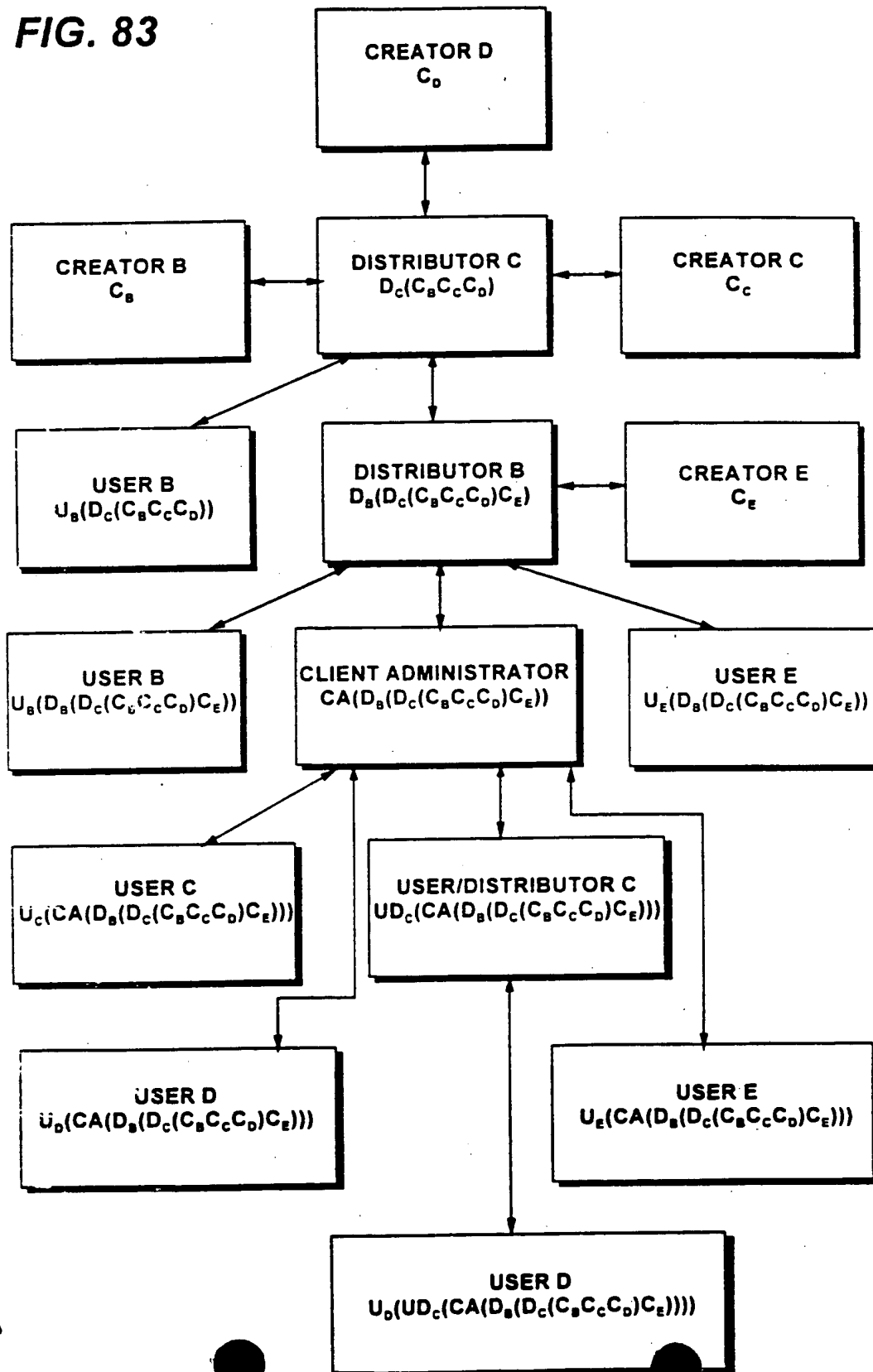


FIG. 82

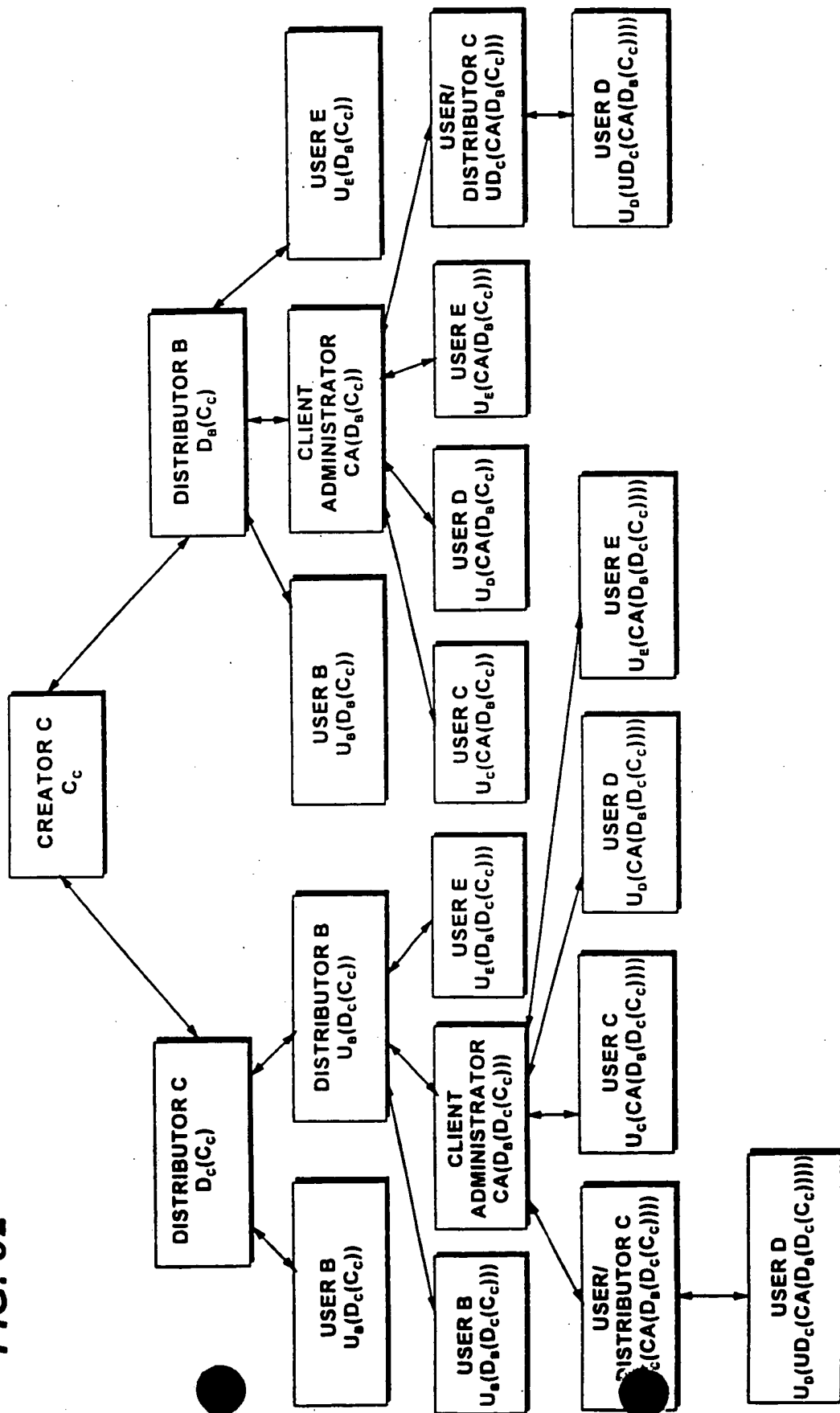


FIG. 85

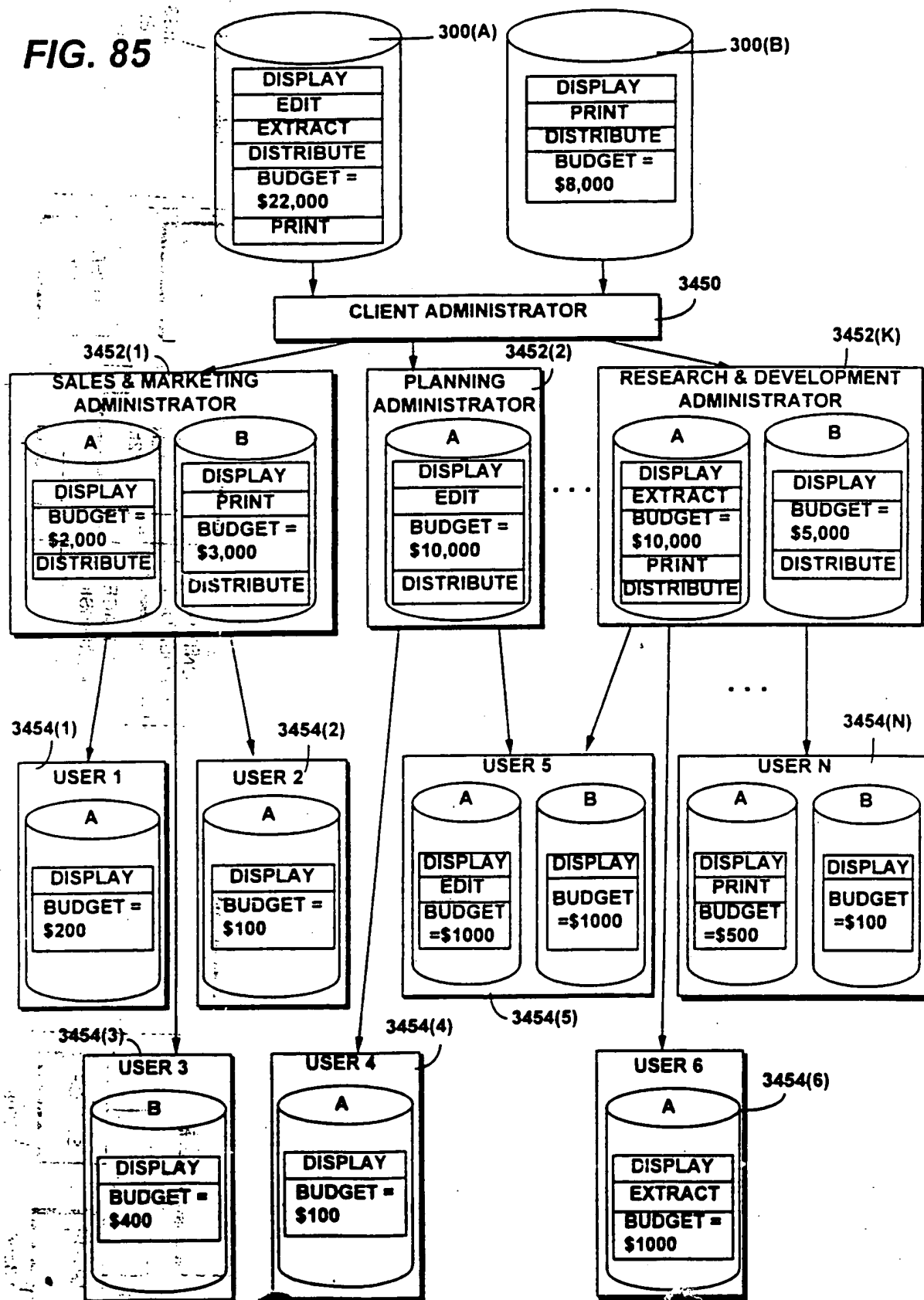
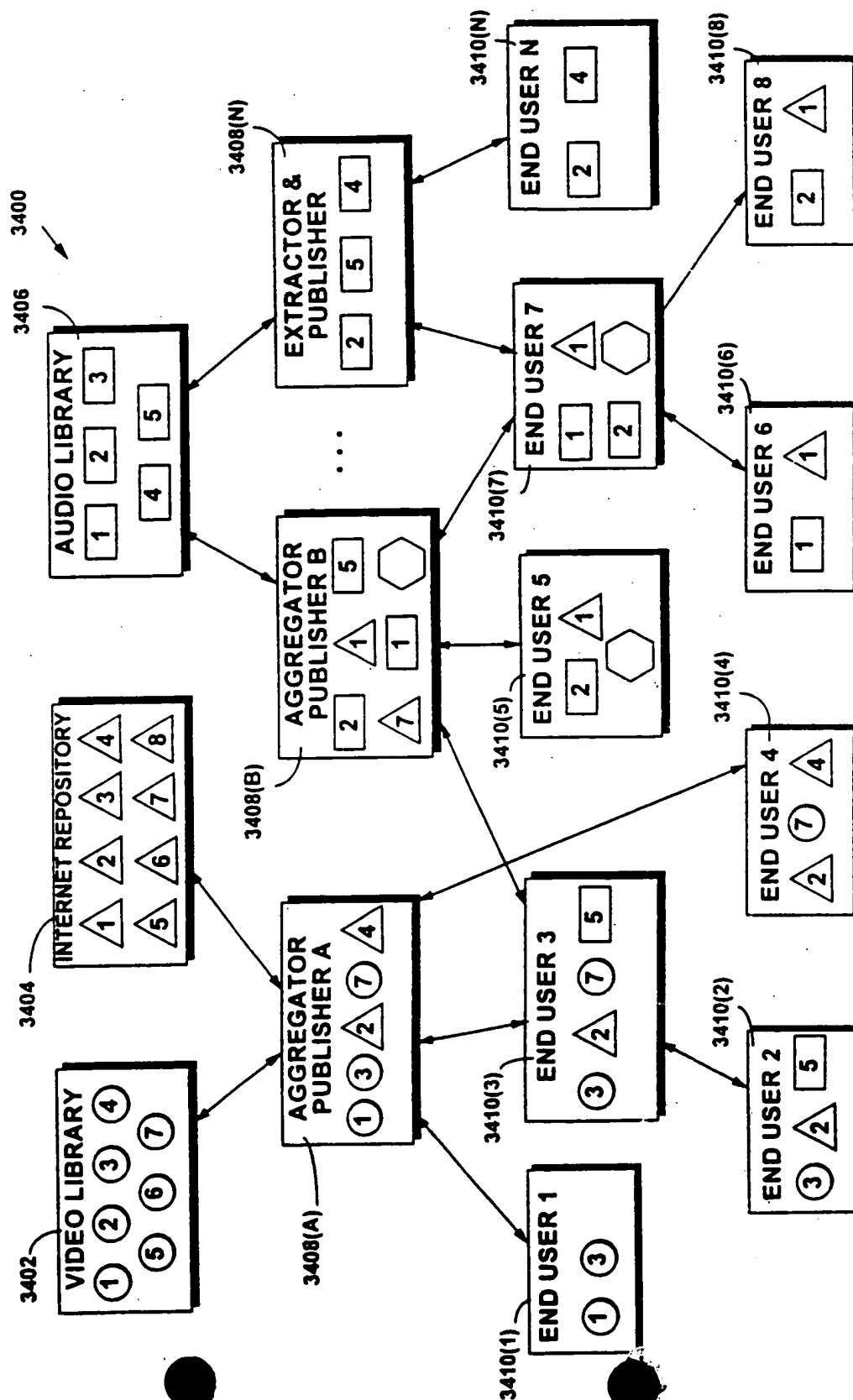




FIG. 84



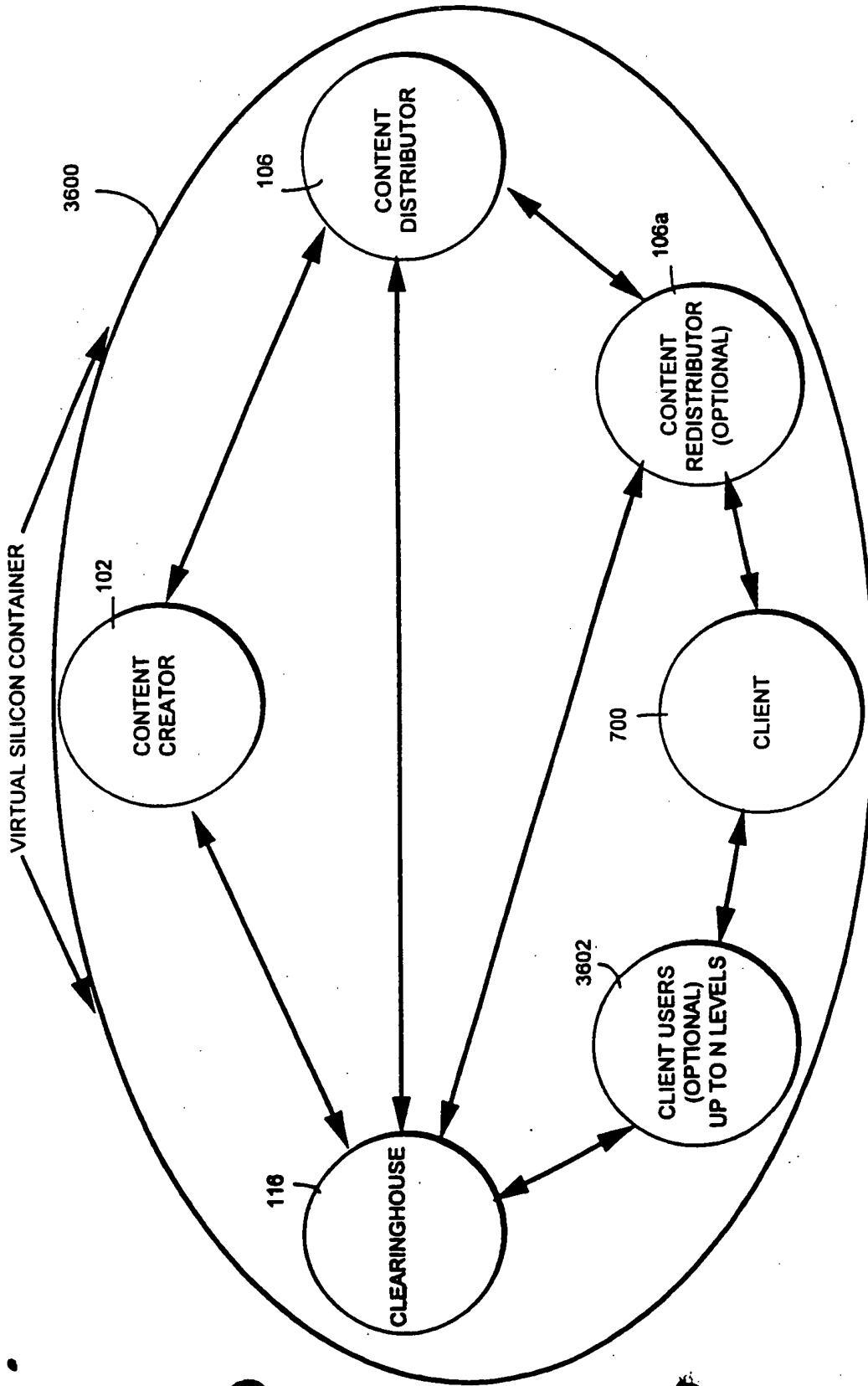


FIG. 87

